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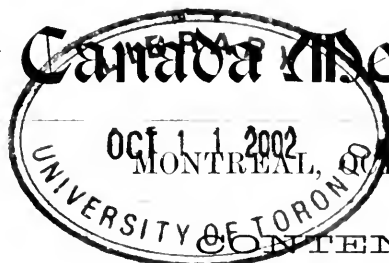






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## Original Communications.

(Read before the Canada Medical Association, Toronto, 1890.)

### ON THE LOCAL ADMINISTRATION OF BICHLORIDE OF MERCURY IN CERTAIN DISEASES OF THE FEMALE PELVIC ORGANS.

By A. LAPHORN SMITH, B. A., M. D., M. R. C. S., England,  
Lecturer on Diseases of Women in Bishop's College,  
Montreal.

Bichloride of mercury has been used for several centuries as an alterative and absorb-facient, more especially to promote the absorption of syphilitic exudations. The mode of administration was generally by the stomach, until a few years ago, when the hypodermic method was introduced. The results from this latter method prove that the areolar tissue under the skin readily admits the drug into the general system, and were it not for the inconvenience of making so many punctures, it would present many advantages over administration by the stomach. The rectum has still later come into prominence as an absorbing surface, and as such there is no doubt that it is even superior to the stomach. The vagina has also been known to be capable of absorbing certain substances, but its exact capabilities in this direction do not seem to have been accu-

rately observed. In a dozen standard works on physiology and therapeutics, the fact that certain substances may be absorbed by the mucous membrane of the vagina is merely mentioned in only one or two of them. That medicaments may be introduced not only into the absorbents of the pelvis, but also through them into the general circulation, has been made evident to me in a great many cases in which I have employed atropine, morphine, iodine, and iodoform, with the results that patients either showed the constitutional effects of these drugs or could taste them in the mouth. In fact, I have found it quite common for patients, who were not aware that I had painted the vagina with Churchill's solution of iodine, to tell me at their next visit that they perceived a metallic taste in their mouths shortly afterwards. The same has occasionally been true of iodoform; while in every case of hopeless cancer of the uterus in which I have made the path towards the grave as pleasant as possible by the local application of morphine and atropine, they have produced all the general manifestations of each of these drugs.

There is one point, however, which may be raised in objection, and of which I do not feel certain as to the answer. Granted that the abraded mucous membrane of the

vagina or cervix does absorb freely, is it also true that the same takes place when the membrane presents no solution of continuity? I am inclined to think that it does, although I have not had sufficient cases presenting the required condition of being free from abrasion in order to demonstrate this point. As far as bichloride of mercury is concerned, I am positive that it is no exception to the rule, in the case of an abraded mucous surface.

I have had a case in my own practice, and I have the record in many cases in the practice of others, in which severe toxic effects have followed the simple irrigation of the vagina with a more or less strong sublimate solution. In the case in which it has occurred in my own practice, sudden diarrhoea, collapse, and suppression of the urine, but ultimate recovery, followed the post-partum introduction of a pint of a one in a thousand solution—but, of course, in this case there were doubtless many abrasions of the mucous membrane. It is also true that in the majority of cases of pelvic inflammation, with or without exudation, the epidermis of the vagina and cervix is, to at least some extent, wanting.

I have now been employing the local administration of bichloride of mercury in doses of one-tenth of a grain every three or four days, on a boro-glyceride tampon, during the last two years, about five hundred times in about fifty cases of vaginitis, endometritis, salpingitis, ovaritis, and pelvic peritonitis, and I feel sure the duration of treatment, before relief has been obtained, has been very much less than was the case before I adopted this method. Exactly how much of my success is due to the bichloride alone, I am unable to say, for the simple reason that, at one time or another of the treatment, in every case, I employed other remedies and measures in addition to it. One of my reasons for attaching so much value to the bichloride of mercury employed in this way, is that nearly every one of the diseases above mentioned is due more or

less directly to septic absorption, and that the more or less constant production of septic matter is necessary to keep up the disease.

The method in which I prepare these tampons is as follows: I make seventy of them at a time of different sizes, from the best absorbent cotton, which I then plunge into a pint of distilled water colored with aniline dye, and in which a seven grain bichloride tablet has been dissolved. If a pint is too much or too little, less or more water may be added, but I find that a pint can be taken up quite easily by seventy of these tampons. Each tampon will, therefore, contain one-tenth of a grain of bichloride. Care must be taken that too strong a dose is not employed, otherwise the discharge becomes irritating to the mucous membrane of the vulva. I employ these tampons in every case in which tampons are required, sometimes using as many as three or four of them either dry or after soaking them as well, in either glycerine or ten per cent. boro-glyceride. Although I believe that this quantity is quite sufficient to have a very material effect upon the germs of putrefaction, as well as on gonococci, the dose is quite harmless, there not being at any one time in the vagina more than an ounce of a one in ten thousand solution, or one-half an ounce of one in five thousand. I have noticed in every case in which I have employed them that the unpleasant odor of the discharges of which the patient had previously complained, has been completely removed, which alone would be enough to make it well worth while employing them. Another advantage is that tampons so prepared may be left from four days to a week without decomposing, which is greatly to be desired in cases which cannot be seen by the attendant every two days. I rarely, if ever, use pessaries, as I find, especially in cases where there are adhesions, that these tampons are painless, never light up inflammation, and are very effective in keeping

the uterus and ovaries in healthy position until the cause of displacement has been removed by other means.

I have brought this matter before you rather with the object of calling your attention to it so that as many of you as think it desirable may try it in your practice, and either condemn or approve, as you are warranted by the results.

### THERAPEUTIC BRIEFS.

(From College and Clinical Record.)

Six grains of iodol a day, with an exclusive milk diet, causes the sugar to wholly disappear from the urine of a diabetic patient (*The Diet Doctor*, June 1890).

An excellent formula for an aperient pill is the following:—

R Aloin,	gr. 1-3,	
Strychninae,	gr. 1-40,	
Extract, belladonnae,	gr. 1-10,	
Extract, casear sagrada,	gr. j.	M.

Dr. A. F. Atkins (*Weekly Med. Review*), recommends, in exophthalmic goitre—

R Pierotovin,	gr. 1-30	
Extract. ergotae aquos.,	gr. iiss.	M.
Ft. pil.		
Sig. —One three times daily.		

In a man suffering from well-marked typhoid fever of ten days' standing, a writer in *The Lancet*, June 21st, states that, thinking this a good case in which to try the remedy, he sent the man home to bed, and ordered him *b*-naphthol in four-grain doses every third hour. The medicine was given in capsules. His symptoms, which were very severe and well marked, at once began to ameliorate, and he was soon convalescent. He adds, there can be no doubt about the marked good effect of naphthol in typhoid, as also in summer diarrhoea and dysentery.

Dr. Leopold Meyer, of Copenhagen, in an original communication on Extra-Uterine Pregnancy (*Annals of Gynecology and Laryngology*, July, 1890), states that the occurrence of extra-uterine pregnancy twice in the same patient is an accident which deserves to be studied with interest, not so much because of its rarity—for as we shall see, it is, perhaps, not so rare as has been believed—but especially on account of the road these cases open up into a study of the aetiology of extra-uterine pregnancy. I have myself observed one case of reiterated extra-uterine pregnancy, and have been able to collect nine other cases from the medical literature of late years.

## TENTH INTERNATIONAL MEDICAL CONGRESS

Held in BERLIN, August, 1890.

[FROM BRITISH MEDICAL JOURNAL.]

### THE EXHIBITION.

The Exhibition in connection with the International Medical Congress at Berlin was opened on August 2nd. The number of exhibits is over 1,000, and many applications have had to be declined owing to want of space. The Maschinenhalle, where the exhibition was first housed, having been found too small for the purpose, it was found necessary to transfer a large number of exhibits to the east wing of the Exhibition Palace. The structural and decorative arrangements have been carried out by Herr Jaffé, whose artistic adornment of the Renz Circus, where the general meetings of the Congress are held, has already been referred to. Anything like a complete account of the numerous and varied scientific apparatus is, of course, out of the question, but a word or two may be said as to exhibits of antiquarian or general interest. These are all more or less associated with the art of healing, and include marvellous specimens of mediæval workmanship in the shape of machine chests, etc., charms and talismans of various kinds, antique instruments, ointment pots, etc., besides portraits, statuettes, and other works of art. Special mention may be made of a seventeenth century family medicine chest from Augsburg, in which the richness of the silver work is remarkable. A statuette of Esculapius, by Ranch, belonging to Dr. Bartels, one of the organizers of the exhibition, is also worth looking at. There is a quaint certificate from the Burgomaster and Councillors of Kottbus, testifying to the successful cure of the wife of Tobias Fielder by Balthasar Kauffmann, "Chirurgus and Chymicus in Krossen"; the document, which has the municipal seal attached to it, bears date April 13th, 1603. Among other interesting objects may be mentioned specimens of the terrific masks which the Indian medicine men use for therapeutic purposes; these masks, which are hideously ugly, are supposed to represent the various devils which, in the pathology of the "Wild West," are the specific causes of different diseases. Each mask is plainly marked, so as to indicate the complaint which it is meant to cure, thus preventing mistakes. Chinese medicine is illustrated by a great variety of medicine boxes, amulets, bath apparatus, wooden snow-spectacles, etc., many of which are noteworthy for their artistic design. The Royal Museum has lent specimens of Roman and Greek votive offerings, consisting of limbs, etc., in marble or terracotta, presented in acknowledgment of the cure of diseases of these parts. The Egyptian Section of the Exhibition is of special interest, containing specimens of instruments, dissecting knives, sounds, etc., in bronze and flint, salve pots, and mortars in alabaster and clay. Herr Philipp Meyer has lent a complete set of porcelain and glass vessels from a Roman apothecary's shop of the 16th century, and the Royal Porcelain Factory has sent a collec-

tion of druggist's vessels. The Friedrich Wilhelm Institute is represented by family and travelling medicine chests of the 18th century, old amputating knives, etc. There is a goodly collection of old medical and surgical works, with interesting illustrations, the instruments represented being chiefly remarkable for their gruesome appearance. Then there are crosses inscribed with prayers against the plague, the dangers of war, etc.; vaccination and inoculation medals, some bearing the portrait of Edward Jenner, with the date 1749, and cholera medals, the latter, of course, belonging to the present century. On one of these, bearing the date 1832, there is an inscription to the effect that it is to be worn on the bare skin, near the region of the stomach. There is a rich collection of portrait medals in gold, silver, and bronze of distinguished German, English, French, Italian, and Scandinavian doctors from the 16th to the 19th centuries. The Exhibition will be open till August 15th, and we hope to be able to give some account of its more strictly scientific part in an early issue.

#### SECOND GENERAL MEETING.

The second general meeting took place on Wednesday, August 6th, at 11 A.M., in the Circus KENZ Sir James Paget being in the chair.

*Infection and Immunity.*—Professor Bouchard, of Paris, opened the meeting with an address on the mechanism of infection and immunity. With regard to the former, Professor Bouchard pointed out that the means of defence of the body against the attacks of bacteria were the phagocytes, and the bactericide condition of the body juices or solid organs. Experiments with sudden refrigeration, carried out on guineapigs, showed that the blood of the animals did not thus become susceptible to the pneumonic virus. Slow refrigeration, however, considerably diminished the power of resistance of the body against bacteria. From these and other experiments it was clear that the juices of the body alone, in their normal conditions, had to carry on the struggle against the pathogenic microbes surrounding the body, and that they could resist them. A sudden weakening of the healthy organism, however, rendered this less resistant to bacterial attacks. By the term "bactericide condition" the lecturer did not mean the dynamic or vital property of the blood, but the chemical property of the normal healthy blood, which rendered it unsuitable as a medium for the existence of the bacteria. Speaking of immunity, Professor Bouchard pointed out that by this term he understood the condition of the body after previous non-fatal infection, in which it was at the same time protected against the pathogenic influences of the micro-organisms. This condition was either produced by an accidental infection with a favourable course or by an infection performed, to a certain extent, with intent, that is, inoculation. He further discussed the manner in which bacteria acted on the body, and distinguished eight different ways in which they did so. He did not enter into the details of each of these ways, but laid much stress on the chemical influences whereby the products of the micro-organisms affected the vasomotor centre in such a way that the exit of the nutritive juices from the blood vessels became impossible. By experiments with bacteric products of assimilation they had succeeded in preventing, over the spot of inoculation, the typical symptoms of inflammation, that is, the exit of white blood corpuscles, redness, swelling, etc. This led to the conclusion that the blood vessels had become impermeable. When the whole vascular

system was affected in such a way there was naturally a severe disturbance of nutrition and derangement of the organism. The favourable effect of inoculation might be explained by the fact that the chemical influences of the bacteric products of assimilation became altered, so that they no longer opposed diaporesis. As to natural immunity, it could not be referred to a bactericide condition of the blood, but only to the greater faculty of resistance and the greater functional activity of the vasomotor centre in certain animals. These properties permitted the continuance of the nutritive activity of the capillary system. Evidence of this statement was furnished by the fact that the power of resistance in such refractory animals was destroyed by the introduction of a substance which hindered diaporesis.

*Puberty and Disease in School Children.*—Prof. Axel Key, of Stockholm, next read a paper on the development of puberty and its relation to the morbid appearances of school children, which was listened to most attentively, and by none more so than by Dr. v. Gossler, the Prussian Minister of Public Instruction. The lecturer began with a report on the measurements and weights of school children which had been taken in Sweden and Denmark during the last ten years. The results obtained in 15,000 boys and 3,000 girls, showed that in the 7th and 8th years the increase in stature and weight was very marked in boys; afterwards, however, a retardation occurred, which lasted to the 14th year, in which a rapid increase of growth again occurred. This increase lasted up to the 17th year; it was most marked in the 15th year; the least increase in the preceding period was in the 10th year. The increase of growth was first in stature, and it was not until later that it also showed itself in the weight. The increase in weight lasted up to the 17th year, when the bodily development was complete. In girls the case was somewhat different. The decrease in growth after the 8th year was not so marked as in boys; in the 12th year it had already given place to a great increase in height. The increase in weight followed that of height, but exceeded it in the 14th year. In the 17th and 18th years the increase in height was but slight; the increase of weight, however, fell nearly to zero in the 20th year of age. At that period growth seemed to be completed. It was strange, said Prof. Axel Key, that the boy, in his whole growth, should exceed the girl up to the 11th year, while from that date up to the 16th year of age he was exceeded by the girl, and afterwards his growth again surpassed that of the girl. These conditions—with slight deviations—proved to be uniform throughout the whole of Sweden. Observations made in America and Italy showed that in girls puberty came on at least a year sooner in these countries. In children of the poorer classes the height and weight were inferior to those of the well-to-do classes, as was proved by the examinations of 4,000 poor school boys at Stockholm. This difference seemed to be less pronounced in America and England. The decrease of growth before puberty lasted longer in poor children than in those of well-to-do people, but once begun the development of puberty was rapid and was completed in the same year as in the children of the well-to-do classes. As to the fact that the growth in height preceded that of the weight the lecturer considered it as a quite uniform one, and particularly if the experiments as to the growth of the children in the different seasons, as ascertained by Westling, of Sweden, and Malling-Hansen, of Copenhagen, were taken into account. With regard to the sanitary

condition of school children during the development of puberty, Professor Axel Key said that exhaustive researches had been carried out in Sweden and Denmark with reference to chronic and hereditary conditions of general weakness and chlorosis; habitual headache, curvatures of the spine, and other chronic affections. Shortness of sight was also taken into account, and was found to correspond entirely with the results obtained by Hermann Cohn, of Breslau. The result of these examinations was to show that out of 15,000 boys of the Swedish schools 40 per cent. were ill in one way or another, 14 per cent. suffered from habitual headache, and 13 from chlorosis. In the preparatory schools 17 per cent. in the lowest classes, 37 per cent. of the next higher class, and 40 per cent. of the highest classes showed illness. Similar conditions were found in Denmark. The cause of these differences lay in the conditions of the development of the puberty. The disease percentages were highest in the period of the retarded growth, and in the time of the greatest increase of growth they were least. For youths the 17th year was the healthiest and the most resistant; from the 18th year the condition of health again became impaired. With regard to the health of girls the state of things in Sweden was frightful. The percentage of disease in the 3,000 girls mentioned above was 61, out of which 36 per cent. suffered from chlorosis, as many from habitual headache, 10 per cent. from curvature of the spine, and 5 per cent. from scrofula. These conditions, said Professor Axel Key, were no doubt due to over-pressure. He concluded by suggesting that uniform international investigation should be made into the whole subject. The lecture was illustrated by about 30 large tables.

### THIRD GENERAL MEETING.

The third and final general meeting was held on Saturday, August 9th, at 11.30 a.m., in the Circus Renz.

*The Next International Congress.*—Professor Virchow opened the meeting with the statement that the city of Rome had expressed its thanks, by telegram, for the decision to hold the Congress of 1893 in that city. The telegram had been sent by the Royal Commissary, who now administered the city of Rome. Signor Crispi also sent a telegram, in which he, as the Prime Minister, expressed his thanks to the same effect in the name of the Italian Government. Professor Virchow urged his hearers to attend the Congress at Rome. He also remarked that the city of Chicago had, in the meanwhile, addressed an invitation to the Congress to hold its next meeting there, as the Universal Exhibition would take place in 1893 in that city. This invitation, however, had, of course, to be refused. The Imperial University of Tomsk (Russia), and the Municipality of the health-resort of Teplitz had also sent greetings to the Congress. The Grand Duchess of Baden, as the Prussian Minister of Education, Dr. von Gossler announced, had addressed to the latter the following telegram:—"The great Congress which is now near its conclusion has, no doubt, during its important session, recalled to your memory the kind and intelligent interest with which my late mother (the Empress Augusta of Germany) would have followed its course. I feel it necessary to say this." The Minister remarked that he had instantly answered the Grand Duchess by telegraph as follows:—"The Congress has hitherto had a splendid course, and has been a great manifestation of peaceful cultural work." Professor Virchow then spoke some warm words of commendation of the late Empress Augusta. He

mentioned her high merits in the furtherance of science and of practical philanthropy, the foundation of hospitals and asylums, etc., and her great merits in making use of the vast resources of international societies—such as were chiefly represented by the *Roths Kreuz*—for the welfare of suffering mankind. Professor Crocq, of Brussels, then took the chair, and the scientific proceedings began with the address of Professor Horatio Wood, of Philadelphia, on anaesthesia. Professor Cantani, of Naples, next spoke on antipyresis.

*Various Proposals.*—After a short interruption of the proceedings, some business matters were dealt with. Two propositions were made, namely, one as to the establishment of an international sanitary convention, and the other as to the foundation of an international hygienic society. Professor Virchow declared that these propositions had nothing to do with the present Congress. A third proposition was brought forward, that a permanent international association of physicians should be established. Professor Virchow declared that this matter could not be discussed before the meeting at Rome, even if it could be discussed at all.

*The Exhibition.*—The General Secretary, Dr. Lassar, then stated that at the instance of the Prussian Minister of Education, Dr. v. Gossler, the exhibition of the Congress would be open until the end of August, and that the Minister intended to take steps to found a permanent medical exhibition at Berlin.

*Addresses by Professors Meynert and Stokvis.*—The two last lectures of the meeting and the Congress then followed, namely, that of Professor Meynert, of Vienna, on the Co-operation of the Parts of the Brain, and that of Professor B. T. Stokvis, of Amsterdam, on the Comparative Pathology of Races and the Power of Resistance of Europeans in the Tropical Regions.

*Professor Virchow's Farewell Address.*—The final act of the last general meeting was the concluding speech of the President of the Congress, Professor Virchow, and the addresses of the foreign delegates. Professor Virchow said that never before had there been so large an attendance at a medical Congress, or one of which the proceedings had been so important. He continued: we shall never forget that no limits of space, no political or religious differences, have prevented you coming to us, with us to seek for truth—pure and objective truth. We have no right to judge of the value of our proceedings; those who have not taken part in it must judge it, and we have neither the right nor the inclination to anticipate their verdict. But we may say this, that the proceedings have been up to the level of knowledge which modern medicine has reached. In eighteen Sections and two Sub-sections the work of the meeting has been done almost without a hitch, and each of us leaves the Congress with the feeling that a great and difficult piece of work has been done here, and that he carries home with him an increase of knowledge.

The members of the Congress who spoke after Virchow's concluding speech also expressed their satisfaction with the course of the Congress, the great hospitality shown to them, and the activity of the Committee, particularly the President. The speakers after Virchow were: Billings, in the name of the United States, who, though speaking English, concluded his address, amid great amusement, with the words used in Prussia: "Gesegnete Mahlzeit" ("Blessed meat," used after dinner, and also as a salutation). Professor Schnitzler, of Vienna, spoke on behalf of Austria; Csàtari for

Hungary; Oka for Japan; Sklifosoffski for Russia; Crocq for Belgium; Holmgren for Sweden; Bouchard for France; Looche for Norway; Guarch for Crignay; Lavista for Mexico; and Baccelli for Italy. Professor Baccelli again spoke in Latin. Virchow answered in some Latin words that he hoped they will meet each other at the "Capitol," like the Roman consuls. After these words of Virchow's, Baccelli embraced him, and they kissed each other. With this fraternal greeting, the meeting and the Congress came to an end.

#### ENTERTAINMENTS.

*Reception at the Town Hall.*—The feasts were on a scale which—to use a favourite and well-applied German phrase—was "colossal." In the evening of Tuesday, August 5th, there was a grand reception of the members of the Congress in the Town Hall by the City of Berlin in honour of the members of the Congress. The reception was a very great success. The rooms of the Town Hall, which are a masterpiece of architecture, were magnificently decorated and splendidly illuminated. At one table were remarked several illustrious personages of political and scientific life. The table was presided over by the Oberbürgermeister (Lord Mayor) von Forckenbeck, and among the Prussian State ministers von Beetticher, von Gossler, Herfurth, Mignel, the late President of the Reichstag, von Lewelow, etc., were present, with the ambassador of Austria-Hungary, Great Briatin, France, etc. Virchow, Lister, Bergmann, Billroth, Paget, Bouchard, etc., were also present. Between 10 and 11 o'clock in the evening the Oberbürgermeister gave the toast of the Emperor of Germany as the protector of science and peace, which was received by the German and foreign physicians with great applause. Then came several toasts to various illustrious members of the Congress; but the person who received the greatest ovation was undoubtedly Virchow, who was carried on his chair by some of his admirers high in air over the heads of those present, like an ancient Teutonic warrior on his shield, with enthusiastic cries of "Hoch! Virchow, hoch! Virchow." The professor endured the somewhat perilous honour, cigar in hand, with smiling good-humour. The same honour was paid to Billroth.

*The Congress Ball.*—The fourth day of the Congress, Thursday, the 7th, was again devoted to the meetings of the Sections, and in the evening the ball given by the Congress took place. Owing to the great number of guests, the "function" had to be divided, and it not only took place in the Central Hotel, whose rooms had been taken for this purpose, but also in four other places simultaneously, viz., the Hôtel Impérial, the Kaiserhof, the Philharmonie, and the Zoologisches Garten. Besides this, several excursions were arranged for this day.

*Reception at the Neues Palais.*—On Friday, the 8th, the reception of numerous members of the Congress in the Neues Palais at Potsdam took place. The Emperor was represented by Prince Friedrich Leopold. In the afternoon a great garden-concert was arranged in the Palace of Potsdam, at which the bands of the 1st Garde-Regiment, the Liebrich-Husaren Regiment, and the Regiment of the Gardes du Corps discoursed most eloquent music. The invited guests were conveyed there and back by a special train and a special steamer. The number of those present amounted to about seven hundred, most of whom were foreign delegates. All the high dignitaries now in Berlin were present, among them the Imperial Chancellor, General v. Caprivi;

besides the Minister of the Exchequer, Dr. Mignel; the Minister of Public Instruction, Dr. v. Gossler, etc., etc. In the Munschelsaal of the Palace, the guests were grouped according to their nationalities, and were saluted by Prince Friedrich Leopold and his wife most cordially. Generalarzt Dr. v. Coler introduced the guests. The Gartenfest was a brilliant success.

*Dinner of the Surgical Society.*—The dinner of the surgeons at the Central Hotel, where nine hundred guests assembled, was the biggest of the sectional dinners. It was presided over by von Bergmann, and graced by the presence of Paget, Lister, Billroth, Le Fort, Péan, Bryant, the Duke Karl Theodor, Hamilton Washington, etc. The dinner card was accompanied by a Latin poetical monologue which began:—

Beatus ille qui procul chirurgicis,  
Securus inter epulas,  
Hilariter maxillis exeret suis  
Quae mensa praebet mucra:  
Non minus fascinatus symphoniacis,  
Jocose blandientibus,  
Quam thyrsos Bacchi raptus pampinifero,  
Solutus omnino opere,  
Neque excitatur osteoeneisibus,  
Nec jam resecto stomacho,  
Neque intestino abhorret intussuscepto;  
Rectique vitat tenebras.

The verses then celebrate the merits of the gastronomic elements of the repast, and ends—

Tum easco gavisus Liberum invoco,  
Spumantem Bachehem-Euhoe.  
Haece ubi locus chirurgus Rubio,  
Jam jam futurus ganeo,  
Pasi caponis femur ipse resecano,  
Rationem novem cogitat.

When Lister was called on for a speech, a cry was at once raised by the Germans, "Lister auf den Tisch" (Lister on the table). It was taken up by one nationality after another until the whole hall was in an uproar, waving their napkins over their heads and standing on their chairs, but it was all without avail. Lister would not rise to the occasion with his feet, though in a few choice words he made everyone who could follow German understand how fully he appreciated the unique honour that had been bestowed on him. The musical programme was as cosmopolitan as the assembly, the composers being Wagner, Ambrose Thomas, Listz, Sullivan, Karpinski, Verdi, Rubenstein, Hartmann (Sweden), Kéler-Béla (Hungary), and Délibes. After the dinner toasting began. Professor v. Bergmann toasted the German Emperor in German language, while Professor Bardeleben saluted the foreign members in French, and mentioned his own studies in Paris, and enthusiastically acknowledged the merits of French science. Léon le Fort, in replying, concluded his speech with the words: "Je bois à la science qui réunit notre intelligence et à l'art qui réunit nos cœurs." Professor Trendelenburg, speaking in English, proposed the health of the honorary members of the "Deutsche Chirurgische Gesellschaft"—namely, Sir Joseph Lister, Sir James Paget, Theodor Billroth, and Ollier. The toast was drunk with much applause. The Duke Dr. Charles Theodor of Savaria proposed the health of the President of the "Deutsche Chirurgische Gesellschaft"—Professor v. Bergmann.

*Court Reception.*—By command of the Emperor, a Reception and Garden Concert was given at Potsdam, at which Prince Leopold of Prussia, the Emperor's cousin, received the guests, attended by Count Caprivi, Court Marshal Count Eulenberg, Herr von Gossler (Minister of Education), and other high officials. Invitations were issued to 500 guests, selected from many of the leading British delegates and members. At the reception, which

took place in the Shell Room, the guests were arranged according to their nationalities, and Prince Leopold, in walking round the circle, caused a number of the representative visitors to be specially presented to him, addressing to each of them a few words of courteous welcome. Subsequently a concert was held in the garden, in the course of which Prince Leopold mixed with the visitors, and conversed with them on subjects likely to interest each. Refreshments were served, and the party returned, being taken back to Berlin by the special train which had brought them. Everything was done to make the medical guests of Germany feel that the German Emperor fully participated in the cordial and generous welcome which had been given to them by the municipality, citizens, and the profession of Berlin, and desired to mark his gracious goodwill to the Congress and all its members. Happily the weather on this as on all the other days of the Congress was peculiarly favourable, and the Court function was in every way an interesting and successful one.

*Dinner at the English Embassy.*—Sir Edward Malet returned to Berlin for the special purpose of showing attention to his countrymen, and gave a state banquet at the British Embassy on Thursday night. The guests were Sir Henry Acland, Sir Joseph Lister, Sir John Banks, Sir William Stokes, Sir William MacCormac, Dr. William Ord, Dr. Buchanan, Mr. Ernest Hart, Dr. Donald MacAlister, Director-General Dr. Dick, R.N., Surgeon-Major Notter (Netley), Surgeon-Major David Bruce (Netley), Surgeon-Major Rogers (Surgeon-General of the Egyptian Army), Dr. Phineas Abraham, Dr. Grant Bey (Cairo), Dr. Baldwin (U.S.A.), and Mr. Bashford. Sir James Paget and Dr. Priestley were unavoidably absent. Mr. Le Poer Trench, Secretary to the Embassy, and Mr. Howitt, attaché, vied with their chief during the week in courteous and obliging attentions to their countrymen visiting Berlin for the purpose of the Congress.

In the evening of Saturday a great entertainment was given by the Berlin physicians at Kroll's in honour of the Congress.

## WORK OF THE SECTIONS.

The following abstracts by specially competent writers will give some idea of the scientific work done in the various sections of the Congress.

### SECTION OF ANATOMY.

It is very questionable if there has ever been a more brilliant gathering of anatomists than that which took place in Berlin during the past week. As was to be expected, Germany was most largely represented. Of those who took active part in the proceedings we may mention Professors Kölliker, His, Waldeyer, Hertwig, Braune, Hasse, Weidenschlein, Schwalbe, and many others whose names are known wherever morphological work is pursued. From Great Britain there were Sir William Turner, of the Edinburgh University; Professor D. J. Cunningham, of the Dublin University; Professor Reid, of Aberdeen; Dr. Symington; Professor Birmingham, etc. Italy was represented by Romiti, Golgi, etc.; and America by Professor Allen, of Philadelphia. From Austria there came Toldt, Benedikt, etc.

An enormous amount of work had to be got through, and the manner in which the business was conducted did not facilitate matters. It must be admitted that the arrangements were not so perfect as they might have been. The Section met

in one of the rooms in the Ausstellungspark. The greater part of the roof was composed of glass, and the heat was tremendous. It was also badly ventilated, and the Section might quite as well have sat in a conservatory. It was therefore necessary that frequent adjournments should be made for fresh air and liquid refreshments in the shape of "lager;" and, consequently, a good deal of valuable time was lost. Notwithstanding this slight drawback, the meeting was a most successful one, and nothing could exceed the kindness and courtesy which were shown by the German anatomists to their colleagues from other countries.

*Honorary Presidents.*—The first meeting took place on Monday afternoon, August 4th, when Sir Wm. Turner was called upon to take the chair. The greater part of the sitting was taken up with preliminary business. Eight or nine honorary presidents were elected. Amongst those who were thus honoured were Sir Wm. Turner, Professor D. J. Cunningham, and Professor Schäfer. And here we may remark a very curious custom which appears to prevail in Germany at meetings of this kind. The real President we understood to be Professor v. Waldeyer, the senior professor of anatomy in Berlin; but he completely effaced himself, and the chair was taken by the different honorary presidents in turn.

*Cerebral Convulsions.*—The work commenced in earnest on Tuesday morning. A discussion was opened by Sir Wm. Turner upon the cerebral convulsions. He gave a very able and comprehensive address on the subject. He was listened to by a very large audience with marked attention, and every one was delighted with the vigour and lucidity which forms so distinctly a character of his style. Professor Waldeyer followed, but his address was not so interesting, inasmuch as it was more circumscribed in its range, and dealt more with detail than with general principles. No further discussion was allowed, which was rather disappointing to some anatomists who were anxious to air their particular hobbies in this field.

*Growth of the Primate Brain.*—The first paper on this day was by Professor Cunningham. He dealt with a stage in the growth of the primate brain, and he endeavoured to show that when the primate head reaches in its development the quadrupedal stage, there appears to be a pause in the growth of the skull capsule, although the growth of the brain goes on steadily and without intermission towards the higher primate development. This quadrupedal pause brings the cranium and the cerebral growth for a short time into antagonism with each other, and the result is the production of a series of transitory unfoldings of the thin cerebral wall.

*Nuclear Division, etc.*—On Wednesday the chief feature of interest was a paper by Professor Flemming (Kiel). The work of this anatomist on nuclear division has obtained for him a world-wide reputation, and consequently his remarks on this subject were listened to with the greatest attention. At the same sitting Professor Anderson (Galway) read a paper.

*Anatomical Nomenclature.*—In the afternoon of the same day the "Anatomische Gesellschaft" met in the "Anatomischer Institut" (Louisenstrasse) for the purpose of considering the question of anatomical nomenclature. There was some difference of opinion as to how this might best be revised and improved. Sir Wm. Turner made a very sensible speech. He pointed out that before anything could be done in this direction some general principles would require to be agreed upon which would guide



the committee that it was proposed to form, and further that, although many of the terms used were very inappropriate, yet they were classical, and held a place in the history of anatomy, and that British anatomists would never consent to give them up. A small committee was finally appointed to take the question into further consideration. Sir William Turner and Professor Cunningham were asked to act on this committee, and they undertook to do so.

*Histogenesis and Interconnection of the Nerve Elements.*—On Thursday the chief feature of the sitting was a discussion which was opened by Professor His upon the histogenesis and interconnection of the nerve elements. Professor Schäfer of London, Küppfer, and Kölliker joined in the discussion. Schäfer in his remarks referred to the observations which have recently been made by Professor Patterson of Dundee and Dr. Mott of London.

*Muscle Fibre.*—On Friday Professor Rutherford (Edinburgh) gave an exhaustive account of his views on muscle fibre, and illustrated his remarks by means of some excellent models and diagrams. His paper excited a great deal of interest, and was discussed very favourably by Professor Merkel of Göttingen.

*The Cardiac Ventricles.*—At the same sitting Dr. G. A. Gibson (Edinburgh) read a paper upon the relative thickness of the walls of the two ventricles of the heart at different stages in its development and growth. Professor Hasse made some important remarks on the same subject. Professor Cunningham also read a paper. In all, somewhere about forty-five separate communications were made. This will give an idea of the large amount of work done.

*Models, etc.*—Some very beautiful models were exhibited in the Section, and also in the exhibition. His has added to his series of topographical models, and both old and new were on view. Gerlach showed a most ingenious model which he had constructed to illustrate some of the changes which take place during nuclear division, and Edinger (Frankfurt) spoke of a model which he had prepared with the view of illustrating the paths followed by the different nerve strands in the spinal cords and medulla oblongata. Unfortunately the box containing it had gone astray in transit, so that he could not exhibit it. Braune showed some very instructive specimens of inflated and dried human lungs, and a series of drawings which showed the line of gravity in a soldier during the several movements which he is called upon to perform when handling his musket.

In the forenoon of each day the Section sat from nine o'clock till one o'clock. There was then an interval of two hours, and at three o'clock the Section, again met in the Anatomical Institute in Louisenstrasse.

*Histological Preparations, etc.*—It was here perhaps that the most instructive part of the proceedings took place. A large room was set aside for the exhibition of histological preparations, whilst a continuous series of demonstrations on new processes, etc., were given in the lecture theatre. It is only possible to mention a few of the more striking of the specimens exhibited. In the front rank we would put the wonderful microscopic preparations of Flemming, of Kiel. Those who are familiar with his papers on nuclear division realised how accurate his drawings and illustrations are. Preparations exhibiting the extension of the polar bodies from the ovum, the behaviour of the male and female pronuclei in the ovum, segmentation of the ovum, etc., were very plentiful, and some of

them were extremely beautiful. Kölliker showed a series of sections through the spinal cord, etc., prepared by Professor Goldi's method. The manner in which the axis cylinders were brought out was very remarkable. Weigert also exhibited some specimens which showed the fibrillar nature of the neuroglia of the nervous system.

*Festivities.*—But the anatomists did not spend all their time in the discussion of intricate morphological questions. We have referred to the frequent adjournments which it was necessary to make on account of the peculiar construction of the room in which they met. Convenient to the door of the room was a Biergarten, and it was with great difficulty that the President rallied his dispersed forces after each such pause in the business. Further, on Wednesday night the anatomists, conjoined with the physiologists, dined at the Hôtel de Rome. This was really a delightful dinner, and marked throughout by the greatest good feeling on all sides. Kölliker proposed the toast of the foreign guests, and spoke of his former close connection with both England and Scotland. He referred to his intimacy with the late John Goodsir, Allen Thomson, and Sharpey. Sir William Turner replied in a peculiarly happy manner.

#### SECTION OF PHYSIOLOGY AND PHYSIOLOGICAL CHEMISTRY.

(Continued.)

Owing to the general meeting in the Circus Renz there was no morning sitting on Wednesday, August 6th.

In the afternoon the following papers were read:—

*Cortical Faradisation of Brain and Associated Eye Movements.*—Professor Schäfer and Dr. Mott (London) read a paper on associated eye movements produced by cortical faradisation of the monkey's brain. The authors divided their paper into four heads: (1) associated movements produced by unilateral faradisation of the frontal region of the cortex; (2) effects of bilateral faradisation of the frontal cortex; (3) effects of bilateral faradisation of the cortex of the occipital lobes; (4) effects of simultaneous excitation of the occipital lobe of the one, and of the frontal lobe of the other, hemisphere. Under the first heading they stated that as regards conjugate deviation of the eyes this frontal area may be regarded as consisting of three zones, namely: (1) a middle zone immediately below the horizontal part of the pre-central sulcus, faradisation of which is followed by simple lateral deviation, well marked, and without either upward or downward inclination; (2) an upper zone immediately above this, which may extend to and include part of the marginal gyrus, giving on faradisation downward inclination, usually combined with lateral deviation; and (3) a lower zone immediately below the middle one, and sometimes extending nearly to the lower margin of the hemisphere, which gives upward inclination, usually also combined with lateral deviation. Under the second heading, of applying a current of equal strength simultaneously to both sides, they found that the effect was not equal on the two sides, so that even a minimal stimulus which would excite one side would produce no appreciable effect on the other. Under the third heading they gave results comparable to those obtained by stimulation of the frontal areas. Under the fourth head they found that the action of the frontal cortex invariably preponderated, so that a simple effect of lateral deviation was obtained. All these points were afterwards demonstrated on the living animal.



*Formation of Sugar in the Body, etc.*—Professor Seegen (Vienna) presented a paper on the formation of sugar in the body. The author brought forward his views already published—that sugar is formed in the liver from proteids, peptone, fat, and not from glycogen. Professor Hoppe-Seyler (Strassburg) read three short communications: (1) on oxyhaemoglobin; (2) on the formation of alcohol in lactic acid fermentation; and (3) on the formation of sugar and lactic acid in carbonic oxide poisoning, and with insufficient supply of oxygen. Dr. Drechsel (Leipzig) read a paper on the products of decomposition of caseine.

*Transformation of Peptone.*—Dr. Shore (Cambridge) read a paper on the question of the transformation of peptone. He said peptone introduced into the lymphatic system was recoverable as peptone in the lymph taken from the thoracic duct. When the lymph was allowed to enter the blood, peptone appeared in the urine. Introduction into the lymphatic system was effected in two ways, namely: 1. Injected into a lymphatic vessel of the foot, and so passing through the lymphatic glands at the knee, and in part through those in the abdomen, the peptone appeared in the lymph taken from the thoracic duct. The glands were unable to change or assimilate 0.016 gr. dissolved in lymph serum of the same animal flowing in gradually and uniformly during ten minutes, when the total amount injected was only 0.049 gr. (9 kilo. dog). 2. Introduced into the bile duct under low pressure peptone passed largely into the lymphatic system. When only 0.1 gr. per ten minutes (9 kilo dog) was allowed to flow gradually in, peptone was found in the lymph taken from the thoracic duct. Some of the peptone passed into the blood, and appeared in the urine. The liver and spleen had no power to assimilate peptone; if injected into blood vessels of either, all appeared in the urine. Change during absorption was probably due to influence of the epithelial cells of alimentary canal.

*Physiological Action of the Elements.*—Dr. Blake (San Francisco) read a paper on this subject. He contended that substances in the same amorphous group gave rise to the same physiological action.

*New Acid in Urine.*—On Thursday, August 7th, Dr. Baumann (Freiburg) read a paper on the separation out from highly coloured urine of a new acid called homogentisine acid. He stated that tyrosin given to a patient led to a large increase of this acid, and the author considered it to be formed by the action of bacteria on the tyrosin normally found in pancreatic digestion.

*Estimation of Oxyhaemoglobin.*—Dr. Sophus Torup (Christiania) presented a communication on a method of estimating oxyhaemoglobin and CO haemoglobin in the circulating blood.

*Fever and Urea Production.*—Drs. Wood and Marshall (Pennsylvania) read a paper on the relation between fever and urea production. In this paper it was stated that the common belief of the increased urea elimination in fever to be an integral part of the process is really not proved, for it may be that such increase is accidental or secondary, due perhaps to the fever temperature, for Naunyn, Bartels, and others have been able to produce it by artificially heating lower animals and men. The important fact is that the body temperature and increased urea production do not keep pace with one another, and that, especially in the crisis of a fever, there may be a low body temperature with a great increase of urea elimination. The latter fact indicates that the real relation is between heat discharges and heat production, as Dr. Wood has shown; that frequently, in the crisis of fever, a low

body temperature co-exists with an enormous increase of heat production. In hepatic fever, contrary to Raynaud, the authors found that on the days of fever the urea production was greater than on normal days. The question whether increased heat production and fever heat may exist with lowered urea elimination has hitherto never been answered, but in two cases of intense fever, caused by section of the medulla from the pons, in which cases Dr. Wood had shown that the heat production is universally augmented, the authors found that urea elimination was almost arrested.

*Estimation of Sense of Smell.*—Dr. Zwaardemaker (Utrecht) read a paper on the estimation of the intensity of the sensation of smell. He showed a simple apparatus for measuring the intensity of smell called forth by different substances, applicable for patients with anosmia.

*Effect of Bile and Other Substances on Pancreatic Juice.*—Dr. Rachford (Kentucky) read a paper on the influence of bile, sodium glycochlorate, and hydrochloric acid on the fat-splitting properties of pancreatic juice. The author said rancid fat emulsified spontaneously without shaking when added to sodic carbonate solution; neutral fat, mixed with pancreatic juice, becomes acid, due to the development of fatty acid, and spontaneous emulsification then results. The presence of sodic carbonate or of HCl retards this fat-splitting property, the presence of bile hastens it; if bile and HCl are both added the fat-splitting property is at a maximum. The formation of the emulsions was then very well demonstrated by passing light through the mixed solutions, and reflecting the appearance on a screen.

*Contraction of Ventricles of Heart.*—Dr. Roy and Mr. Adami (Cambridge) brought forward a communication on the contraction of the ventricular walls and of the musculi papillares respectively, and the manner in which these combine to affect the pressure within the ventricles as well as the pulse curve in the aorta. Already in part published in the *Practitioner* this year.

*Form of Red Corpuscles.*—Dr. Mihajlovits (Budapesth) presented a communication on the form assumed by the red corpuscles of different animals under the influence of different reagents, and their staining power with different fluids.

*Movements after Ablation of Cerebral Hemispheres.*—Dr. Sterner (Cologne) read a paper on the movements called forth in different animals after the removal of the cerebral hemispheres.

*Removal of Liver.*—Dr. Ponick (Breslau) showed two rabbits just killed, from which he had, six months ago, removed in one case a half, and in the other three-quarters, of the liver.

*Motor Nerve Supply of Larynx.*—In the afternoon this Section was joined by those for Nervous Diseases and Laryngology, when V. Horsley and Semon gave a demonstration on their work on the motor-nerve supply of the larynx in the cat and in the dog. This was done by means of a lantern and screen. The central nervous system being exposed in the animal, and the trachea being cut through well below the cords. Into the lower half of the trachea a tube for artificial respiration was introduced, and the lower end of divided upper part being drawn forward. At the same time, the mouth being fixed widely open, and the tongue drawn well forward, the light from a lantern being directed into the fauces, all the movements of the cords were represented on the screen. As the result of their experiments, the authors have been able to localise an adductor centre on the cortex in both cat and dog, but stimulation of the centre in the

dog, corresponding to the abductor centre in the cat, produced only slowing and intensification of the movements. Also that one-sided irritation produces double-sided movements. From this it follows that a one-sided paralysis of the cords as the result of a lesion of the cerebral hemispheres does not exist, and also that motor aphasia is not identical with aphonia. On account of the prostration of the animal experimented on, they were on this occasion unable to demonstrate satisfactorily that the adductor fibres could be stimulated in the external capsule, and that closure of the larynx could be produced by stimulation when the whole of the hemispheres were removed. Dr. Anodi (Budapesth), after the demonstration, stated that, after section of the recurrent laryngeal nerve, the branches which go to the abductors die before those which supply the adductors. Professor Dubois-Reymond (Berlin) stated that in some animals, such as the cat and cow, phonation was by means of inspiration, and not by expiration. Professor Exner (Vienna) said that this was also the case in the pig, and gave a very realistic demonstration of how the grunt was produced by inspiratory effort.

*Effect of Section of Lateral Column and Cord.*—Dr. Mott (London) then described and showed specimens of the section of the lateral column of the spinal cord in monkeys in the dorsal region at different levels. As the result of these experiments he summarized as follows:—1. The section of bilateral associated movements after three to four weeks, in the lower limb commencing with the hip and knee-joints, then of the ankle, and lastly of the toes. 2. Sensation generally diminished on both sides (*a*) to heat and cold as tested by dipping the feet into hot and cold water, (*b*) to painful sensations, (*c*) to touch. 3. The temperature in the popliteal space was lower by 1 to 2° F. on the paralysed side, while the skin of the foot, owing probably to vasomotor paralysis, was swollen and dry, and 3° to 4° higher than on the non-paralysed side. 4. The spinal cords were hardened and cut; sections show complete destruction of the lateral column of one side, with partial destruction of the posterior lateral columns. The degenerations above and below the lesion were limited to the same side. In one case, after the animal had lived five weeks, a second section was made low in the dorsal region; this produced complete paraplegia, but there was still some slight sensation left. The animal lived four days.

*Pigment of Eyes of Invertebrates.*—Professor Exner (Vienna) read a paper on the pigment of faceted eyes of invertebrates. He showed several photographs and drawings illustrating the movements of the pigment under the influence of light.

*Trophic Nerves of Larynx.*—Professor Exner also presented a communication of the trophic nerves of the larynx. He said that section of the superior laryngeal nerve gives rise to atrophy of the internal and external thyroarytenoides and of the interarytenoides muscles.

*Blood Pressure.*—Dr. Mosso (Turin) read a paper on the measurement of the blood pressure in man.

*Latent Period of Muscular Contraction.*—Dr. Burdon-Sanderson (Oxford) showed photographs of his method of recording the latent period of muscular contraction, which were obtained by exposing to a rapidly moving photographic plate the changes produced in the form of the muscle, and those in a capillary manometer, used to record the latency of electrical change. By this method he had found the latent period shorter than was previously supposed, being only  $\frac{3}{1000}$  of a second.

*Formation of Lymph.*—Professor Heidenhain (Breslau) presented a communication on the formation of lymph. He said certain bodies injected into the blood increased the flow of lymph. These may be divided into two classes. 1. Salts, sugar, urea, etc., which, when injected into the blood, pass out into the lymph. The blood becoming richer in water, the large amount of water in the lymph being derived from the tissues themselves. 2. Peptone, extract of the leech, extract of the muscle of the crayfish, injected only in minute quantities. The lymph is increased tenfold; its percentage of solids is also increased, especially in albuminous matters. He considered lymph to be a true secretion, and not a mere filtration from the blood vessels.

*Collodion Casts of Muscle Fibres.*—On Saturday, August 9th, Dr. Havercraft (Edinburg) demonstrated his collodion casts of muscle fibres. If a few muscle fibres be teased and pressed on a film of collodion not completely dry, and if fibres be then removed, they leave moulds or impressions in the film. These show all the microscopic characters of muscle fibres, even to the minutest details. When the collodion dries these become effaced through contraction of the collodion. If the collodion be coloured the moulds are also coloured. He believed that these moulds prove that the cross stripping of the muscle is not due to the internal structure of the fibres, but to their form, each fibril being a varicose thread of tissue. He thus viewed the striped fibre to be an originally unstriped one, which, instead of shortening and so thickening as a whole—segments into minute masses, each mass shortening and thickening at a much quicker rate. Also that the movements of the stripes which occur during contraction are simply the optical appearances due to the change of form of the varicose fibre during contraction. Photographs of the collodion casts, and also the optical properties of varicose glass rods, were then demonstrated on the screen by means of a lantern.

*Origin of Nerves in Invertebrates.*—Dr. Biedermann (Jena) read a paper on the origin of nerves in the ganglia of invertebrates. He showed preparations chiefly stained with Ehrlich's methylene blue, mostly from the leech, in which the motor fibres were connected with the ganglia cells by a very definite clearly-staining axis cylinder, while the sensory fibres were only in connection by means of a multitude of extremely fine anastomosing branches.

*Fluid Condition of Blood in the Living Body.*—Dr. Alexander Schmidt (Dorpat) read a paper on this subject. He said from all living cells two groups of bodies could be extracted (1) by means of alcohol, which, when added to blood or plasma leads to increased rapidity of clotting. These act chiefly by generating fibrin ferment from the mother substance present in the colourless corpuscles. Lecithin belongs to this class. (2) By means of water. These are chiefly the so-called extractives of cells, such as xanthin, hypoxanthin, keratin, etc., which tend to retard the clotting. Dr. Heidenhain (Breslau) called attention to the observations of Shore, that peptone added to lymph out of the body in minute quantities retards clotting, but when more is added till 1.5 per cent. is present accelerates clotting, at 5 per cent. again retarded.

*Pressure in Cardiac Ventricle and Aorta.*—Dr. Hinkle (Breslau) showed a differential manometer designed to register the difference of pressure in the ventricle and aorta. His experiments prove (1) the flow of blood from the ventricle lasts till the end of the systole, therefore there is no contraction of the ventricle after it is empty; (2) the

semilunar valves close at the beginning of the diastole.

*Anatomy of Horse's Foot.*—Dr. Macdonald (Glasgow) read a paper on the anatomy of the horse's foot, particularly in relation to the arrangements formed for distributing pressure.

#### SECTION OF PATHOLOGY.

(Continued.)

*Biology of Lancet-Shaped Diplococcus.*—On August 5th, among the purely bacteriological papers, Dr. Pio Foà brought forward the results of an investigation into the biology of the lancet-shaped diplococcus. This diplococcus, found in cases of pneumonia and pleuropneumonia, causes an inflammatory condition of the pleura and lung when injected into the pleural cavity and the lung tissue. There is no space to state all the facts brought out by Dr. Foà as to the biology of this organism, but towards the end of his preface he made a statement which was of great interest. This was that if a culture of the organism were filtered through Chamberland's filter or sterilised, the filtrate containing no organisms produced inflammation when introduced into the pleura and the lung. This is only another fact tending to show that micro-organisms produce their effect in disease by forming chemical products, which are the direct active agents in the causation of bacterial diseases.

*Prevention of Diapedesis by Microbes.*—Messieurs Charrin and Eley (Paris) followed with a most interesting communication. From the researches chiefly of Bouchard and Charrin, it is now well-known that the organism, which is the cause of blue pus—the bacillus pyocyaneus—is a pathogenic organisms for rabbits. In these animals it produces a local lesion when inoculated with fever and inflammatory lesions of some internal organs. The work of Charrin and of Ruffer showed that when a culture of the organism was filtered through Chamberland's filter or sterilised, the filtrate produced the lesions observed when the organisms were inoculated. Moreover, this filtrate is, under certain conditions, protective against the disease, and the sterilised or filtered urine of an animal suffering from the disease may be used for the purposes of vaccination. The present communication of MM. Charrin and Eley was entitled "La mode de l'action de la substance microbienne qui empêche la diapédèse." The title of the paper, however, is rather a deduction from the experiment than an indication of what M. Eley brought forward. The consideration most apparent was: If this culture filtrate injected into an animal prevents the development of the disease caused by bacillus, it must contain a substance which prevents inflammatory changes. This is, perhaps, a somewhat premature deduction. However this may be, the actual experimental results brought forward were of great interest. The culture filtrate of the bacillus pyocyaneus when injected into an animal effects the vasomotor system, so that vasodilatation is diminished. Thus, if the central end of the depressed nerve of the rabbit be excited, there is a fall of blood pressure, due to the dilatation of blood vessels generally, but chiefly of those going to the abdominal organs; this is the normal effect. After the injection of 20 to 30 cubic centimètres of the culture filtrate into the circulation, only a slight effect on the blood pressure is produced by exciting the central end of the depression nerve. Some substance, therefore, in the culture filtrate has so affected the vasomotor centre as to prevent dilatation of the blood vessels. The experiments on the

depressed nerve were supplemented by similar experiments on the vagus. Normally, stimulation of the central end of this nerve produces a well-marked fall of blood pressure. After the injection of the culture filtrate this fall is much less than before, although it is still evident. Again, excitation of the central end of the cervico-auricular nerve in the rabbit produces, normally, a rise of temperature of the ear of the same size, with a great dilatation of the blood vessels of the ear. After the injection of 20 to 30 cubic centimètres of the culture filtrate, the dilation is much less apparent. The temperature was also affected, and as this is an important point, the author's results may be quoted in the table given by them:—

Injection of Culture Filtrate.	Time.	Before Excitation	After Excitation	Difference of Temperature
	3.10 P.M.	30.0 °	30.9 °	0.9 °
	3.22 P.M.	29.6 °	30.65 °	1.05 °
20 c.c.	3.30 P.M.	28.1 °	28.6 °	0.5 °
30 c.c.	3.50 P.M.	27.8 °	28.4 °	0.6 °

Corresponding, therefore, to the slight dilatation of blood vessels, there was a slight rise of temperature on stimulation after the injection of the bacterial culture filtrate. MM. Charrin and Eley do not pretend that their investigation is concluded, and have yet to confirm the results already obtained, and to clinically examine the culture filtrate with the view of isolating the substance or substances which has the effect just described.

*Lesions of Myocardium.*—On August 5th and 6th, the discussion on lesions of the myocardium was introduced by Professor von Recklinghausen, and, in the absence of Professor Greenfield, continued by Professor Leuker, who limited himself to confirming the statements made. This subject is one of great clinical and pathological interest, but it is one which unfortunately is more apparent to the pathologist than to the clinician, because during life it is always a question of uncertain inference whether the heart muscle is affected or not. Professor von Recklinghausen in his address brought together the facts as they have been observed by the pathologist. Degeneration or dissociation of the muscle fibres of the heart (segmentary myocarditis) is a constant appearance observed in the following conditions. First, in cases of rapid or sudden death resulting from bruising of the myocardium associated with disease (narrowing) of the coronary arteries, and in those cases where there is rupture of the heart, or of the region of the origin of the aorta. Secondly, in paralysis of the heart, in infectious diseases, such as typhoid fever, small-pox, septicemia, and generalised purulent formation (pyemia). Thirdly, in rapid death in cases of nephritis, and of acute lesions of the central nervous system. Lastly, in certain special modes of death, Dr. von Recklinghausen went on to say that the microscopical rupture of the muscular fibres of the heart might occur during the agony of death. In the advanced stage of this condition, transverse rupture might be seen in the separated muscle fibres, the longitudinal striation of the fibre being still intact, while the nuclei are indistinct, and do not stain well. A similar appearance is observed if the muscle fibres be ruptured artificially soon after death. All lesions of the muscles of the heart have one result, namely, that of diminishing the contractility of the muscle

fibre. The cause of the actual lesion of the muscle fibre may be ascribed to changes (narrowing) of the coronary arteries. In some cases, for example, parenchymatous or rheumatic myocarditis, there is no lesion of the arteries; there may be in these cases constriction of the vessels resulting in degeneration of the muscle. General (progressive) anemia, plethora, and venous hyperaemia do not lead to the degeneration of the muscle fibres above described.

#### SECTION OF MEDICINE.

(Continued.)

*Chyluria*.—Wednesday afternoon was occupied in this Section by the reading of papers on various subjects. Amongst these we may mention one by Dr. Myers, on Chylurias.

*Treatment of Diabetes*.—Thursday morning was occupied with a discussion on the treatment of diabetes. The subject was introduced by Dr. Payr. Bujardin Beaumetz was to have followed, but, as he was not present, the paper which he sent was read. Amongst the others who took part in the discussion we may mention Seegen and Lépine.

*Treatment of Heart Disease*.—The discussion on the treatment of heart disease was very meagre, owing to the absence of Professor Nothnagel, who was to have opened the subject.

*Myxoedema*.—The discussion on myxoedema was opened by Dr. Ord, who gave an excellent summary of all that is known, as the following brief abstract shows: (1) Sex: Whereas in Sir William Gull's first paper the disease was described as affecting women, men appear to be affected in at least 10 per cent. (2) Heredity: Special attention should be paid to this, as several instances have recently been noticed. (3) (4) speaks of the early enlargement of the thyroid, and the author related a case where myxoedema coexisted with goitre and exophthalmos. (5) Tendency to hemorrhage indicates one of the serious dangers of the disease. (6) Under this heading the author spoke of the physiognomy, pathology, chemistry of the tissues, and the relation of the thyroid gland to myxoedema. Under the heading of treatment, the author briefly alluded to the implantation of portions of thyroid gland. Professors Mosler and Horsley took part in the discussion.

The time of the Section was so much taken up by papers on various subjects, that the discussion on the other theses was very meagre.

#### SECTION OF SURGERY.

(Continued.)

*Osteopneusis*.—On Tuesday, August 5th, Professor Ollier, of Lyons, read a paper on this subject. He began by considering the growth of bone in general, and gave a full account of his researches into these question, in which by a series of experiments performed on animals, as well as in consequence the numerous operations which he had performed on man, he had been led to the following conclusions: New bone could in reality be formed from the periosteum alone, and only under certain wellknown conditions. It was perfectly hopeless to expect any complete and permanent growth of bone to take place unless the periosteum surrounded it. It was, indeed, true that if the parts were aseptic for a time, the new bone, or implanted bone, as the case might be, seemed to grow, but this was only for a time. Within six months necrosis took place, and the dead bone if loose, was thrown off, or might re-

main encysted in some instances, and, if it did no harm, was certainly of no advantage to its possessor. This was a fact which had been known for many years, and there was, he believed, notwithstanding what had been said to the contrary, no exception to it. If a more minute examination were made of the implanted bone, it would be seen that the changes which took place in it were as follows: It was penetrated by blood vessels from the surrounding bones and tissues, but these vessels played no part in its nutrition, but served only to further its absorption. Perhaps no more striking evidence of the value of the periosteum could be given than the following: On one of his patients, a young woman, he had operated three times, resetting her elbow-joint on each occasion, but the periosteum had been retained, and on each occasion she had made an excellent recovery. Practically there were three kinds of plans which might be employed, which might be styled: (1) autoplasic, in which the same bone was used to repair some deficiency in itself, and the bone was only partially severed from its connections as, for example, where a piece of bone was turned down from the forehead to make a new nose; (2) the second of these plans was well described as homoplastic, that is, when the graft is taken from the same individual, but not from the same bone; (3) the third, or heteroplastic, plan is applied to those cases in which a bone of some other individual or animal is made use of. The first and second plans were all but useless, and the third quite so, that is to say, the implanted bone could not ever grow. With regard to the question of excisions, it was, of course, a case for either movement or ankylosis. He had nothing to say, except that in the lower limb we must always have ankylosis, and in the upper movement, though an exception might, perhaps, be made in the case of the wrist, where a fixed or partially fixed joint would be more useful to the patient than a movable one.

*Surgical Treatment of Intussusception*.—On Wednesday, August 6th, Mr. Jonathan Hutchinson presented a communication on this subject. After alluding to the great fatality of the disease, particularly when it affected very young children, Mr. Hutchinson made some excuses for seeming to discourage laparotomy at the present time, when such a marvellous record of success could be credited to it. He ventured to doubt, however, whether it was at all reasonable to except that a large measure of success could ever attend laparotomy for such a condition. Of four cases of his own, only one had been attended with success, and he seemed to regard the success in this case as due rather to luck than to any special peculiarity of the mode of performing the operation. The younger the child the more fatal was the disease, indeed, he knew of no case in which recovery had taken place under one year old. However early the case was seen, the result must be a matter of doubt. Resection of the gut had been recommended where reduction proved to be a matter of impossibility, but it must be very rare that the child was in a condition to bear so severe an operation. He confessed that he felt inclined to put his faith rather in the early administration of chloroform coupled with inflation either of water or air, and should this plan fail, he was inclined to think that Nature was more likely to bring about a cure when unaided by laparotomy. He showed a rubber tube with a piece of glass tubing inserted somewhere in the middle, so that he could see what was going on and he cautioned his hearers against the use of

any excessive force. Mr Howard Marsh took up the cudgels in favour of laparotomy. He had had two successful cases, and if he had operated as early in all his cases as he now did he believed he should have been able to record more cures. If inflation failed no time should have been lost in operation. It was not fair to leave cases to Nature. If the history of the cases that recovered by masterly inactivity was looked into, it would be found that they were not very severe cases; he did not believe there was any case on record which had resisted inflation, and subsequently undergone cure by natural means.

*Resections of the Stomach and Intestines.*—On the same day, Professor Billroth read a paper on resections of the stomach and intestines. One hundred and forty cases were recorded, which comprised the whole of those that had come under the Professor's own hands. The technique of the operation was scarcely alluded to, as it had already before been published. The plan of suturing adopted was that known as the Lembert or Czerny-Lembert plan, the latter being seldom adopted, whilst occasionally the plan had been adopted of inserting one piece of intestine into another. Practically about half the patients had recovered from the operation, though, as well be seen from the subsequent account, the mortality is far greater in certain classes of operations, and more particularly is this the case when the upper part of the small intestine is affected. Of pylorus resections, about twenty cases had been operated on by him, half of which died from the operation itself. All of the cases in which this operation was performed were the subject of cancer, though some were far more favourable to operate on than others, as the disease was not at the time of operation very infiltrating in character, but was chiefly confined to one spot, where considerable ulceration had taken place. Where there was much infiltration of the surrounding parts, an operation was almost impossible. Of those that survived the operation, some four or five had lived in comparative comfort for a few months; two cases had survived from one year to a year and a half; one case had survived two years, and one was alive five years after the operation. Twenty cases of gastro-duodenostomy were recorded, one-half of which had been performed by Wolfiler's method (in front of the transverse colon), and one-half by Haeke's (behind the transverse colon). They had nearly all been attended by temporary success, which of course was all that could be expected. Of ten cases of resection of the small intestine with the formation of artificial anus, all recovered from the operation. On eight or ten occasions the cecum had been removed, but it was always a difficult operation, and did not yield satisfactory results. It was best to insert the small intestine into the large after such an operation. In two cases of cancer of the descending colon he had attempted resection, but both had died. In the case of the rectum the results were remarkably good; none had died directly after the operation. In two instances a portion of the rectum had been excised, and the upper and lower ends of the bowels brought together. Semm's plates had never been used by him on the human subject, but he had employed them on the dog, and was satisfied with their efficacy.

*Hypertrophy of the Prostate.*—Professor Bottini (Pavia) read a paper on this subject. After giving some account of his earlier experiences in this subject, Professor Bottini stated that he operated now on any case of enlarged prostate, provided there was difficulty in urination. He had operated on

over sixty cases and lost five. His operations had been on the whole good in its results, but in some instances it required repetition. He displayed his battery and his instruments, together with the method which he adopted, and showed that he could limit the galvano-cautery action to the special part that he was operating on by holding the other part of the instrument in his hand. The same experiment was tried by others, conclusively showing that the surrounding parts were not cauterised. The instruments were shaped like a lithotrite, and the male jaw was made of platinum, was, in fact, a platinum knife which cut through the opposing piece of prostate. It resembled Mercier's instrument for prostatectomy, after which it was evidently modelled. Mr. McGill (Leeds), who was present, gave some account of his method of suprapubic prostatectomy, and referred to the cases which had been shown by himself and his colleagues at the meeting of the British Medical Association at Leeds in 1890. He also alluded to others which had since been under his care. The main objection which he thought must be made to Bottini's plan, as shown even by his own results as well as by his (McGill's) operation, was that it was impossible to tell by rectal and urethral examination what was the actual condition of the prostate. He claimed for his own operation that at present it was the only satisfactory one in the field, and that it certainly yielded good results. Mr. Bruce Clarke stated that he had once succeeded in treating a case after the plan laid down by Bottini, though he had not used nearly so powerful a current, but he had never since had a successful result, though no harm had resulted to his patients. He quite agreed with Mr. McGill's statement that it was impossible to diagnose what the exact conditions of the prostate was from the outside. It must be borne in mind that the prostate contained oftentimes myomatous exactly like those in the uterus, and the only rational way of treatment when the catheter failed was to attack the prostate through a suprapubic opening.

*An Account of 247 cases of operation for Rectal Cancer in Norway, Sweden, and Denmark.*—Professor Dr. Axel Sverisen (Copenhagen) presented a communication with this title. With the paper was handed round a table of the cases, tracing as far as possible their ultimate results, together with the operator's name, and the exact nature of the operation which he had performed. One of the most interesting facts which were brought out in the paper, was the early age at which the disease may occur, five cases being recorded under thirty, and twenty-one between thirty and forty. Removal of the Rectum: Just over one hundred cases are recorded—twenty-five per cent. of which died within the first month. About fifty per cent. lived from three months onwards and one died nearly nine years after the operation, with a secondary deposit in the left kidney. Twenty-five per cent. of the cases are still alive, three between five and six years after operation, and one nearly seven years after operation, and two nine years after operation. Resection of Portion of the Rectum: eight cases died from the effects of the operation. Fourteen cases died in from three months to four years, and all had recurrence either *in situ* or at a distance, whilst seven cases are alive from nine months to four-and-a-half years after the operation without any recurrence. Sixteen died as a consequence of the operation, and sixty-three were much benefited, five having survived the operation from two to four years. An animated discussion ensued. Mr. Bryant stated that to get good results from

excision of the rectum, the patient must be seen early, and the disease must not involve more than the lower two inches of the bowels. Where the growth extended further, this colotomy was indicated; he performed the lumbar operation. He had rarely lost a case by it, and in some instances the cancerous growth had been so retarded by the operation that the patients had survived five years or more in great comfort. Professor Lange (New York) described a plan by which when the cancer did not involve the sphincter, it could be retained, and this add enormously to the patient's comfort after operation. Professor König (Göttingen), referring to Mr. Bryant's remarks, said that his proposals for rectal removal were too limited, and alluded to a case of his own that was alive four years after operation. Professor Czerny (Heidelberg) was also in favor of the more extensive application of resection, and said he had more than once opened the peritoneum, but he had closed it again at once with sutures without any ill effect. One of his cases had survived the operation over six years. It must be borne in mind that cases of rectal cancer differed very much in their rate of growth; some were rapid, and others almost as slow as rodent ulcer.

*Diagnosis and Surgical Treatment of Shot Wounds of the Stomach and Intestines.*—Professor Senn (Milwaukee) read a paper on this subject. In a most dramatic address Professor Senn described at length the modes which he employed, and he drew especial importance to the following points: 1. The direction of the bullet. A wound of the abdomen from side to side was far more dangerous than one in the antero-posterior direction. This latter variety might perforate the body and yet not wound the intestines, whilst a lateral wound would almost certainly perforate the intestines in from five to sixteen places. 2. Probing was absolutely useless. The first thing was to ascertain if the bullet had entered the peritoneum, if so the anus must be inflated at once and a glass tube introduced by the wound into the peritoneum, when three minutes would determine whether the gas emerged from the tube and could be lit there; if so, it was clear that the intestine was wounded and the hole must be sought for. As soon as the lowest wound in the intestine was discovered, which was easy enough as the bowel was only distended up to where the escape took place, the tube was removed from the anus, and placed in the lowest intestinal wound, after which wound number two was found. In a similar fashion the tube was introduced into number two to find number three, and so on until the operation was completed. With a view to demonstrate these facts, a dog was brought in, and hydrogen was pumped from anus to mouth. A somewhat laughable incident, which delayed the experiment, here occurred. The Professor in his hurry introduced the hydrogen gas into the vagina, and it was at least ten minutes before the reason of the non-passage of the gas was discovered. Matters, however, were soon set right, and in less than two minutes the gas emerging from the dog's mouth was lighted. A dog was then shot in the presence of the audience through the abdomen from side to side, and the wounds one after another were demonstrated with the greatest ease. The Professor concluded his remarks by assuring his audience that gunshot wounds of the abdomen, which had been reckoned as amongst the most fatal of wounds, could now be treated with success "in any shanty or even at a fence corner."

#### SECTION OF MIDWIFERY AND GYNECOLOGY.

No fewer than 405 members of the Congress joined this section, and 17 papers were read, 51 persons taking part in the discussions. Much regret was expressed at the absence of Dr. Galabin owing to indisposition, that distinguished obstetrician having been invited to introduce the subject of antiseptics in midwifery.

There is no room to notice the papers at length, and a recapitulation of their titles would be tedious. The manager of the Section, Dr. Martin, and the Berlin Secretary, Dr. Veit, did their best to ensure the reading of as many papers as possible, and to encourage discussion. Drs. Olshausen, Martin and others operated at their hospitals in presence of members of the Congress, and Mr. Tait was invited to operate after his method, on a case of ruptured perineum. Great Britain and Ireland were fairly represented on this Section; amongst our countrymen were Drs. Priestly, John Williams, A. K. Simpson, C. H. F. Routh, Murphy (Sunderland), Cameron (Glasgow), Berry Hart, Barbour, O'Callaghan (Carlow), Macan, More Madden, Stuart Nairne (Glasgow), Japp, Sinclair, Mr. Lawson Tait, Mr. Alban Doran (Secretary), and others. A very considerable proportion of the Americans who took part in the Congress joined this Section.

*Electrolysis in the Treatment of Uterine Myoma.*—An animated debate was held on electrolysis in myoma, Dr. Priestly being for the occasion in the chair. Dr. Apostoli defended his system in a temperate manner, and did not claim that it was a panacea; he appealed to his experience, having applied electricity to 531 uterine fibroids with only 1 death, "*imputable à des fautes opératoires*," and found that the method at least gave relief whilst the danger was as nothing compared with the risk of laparotomy, cauterisation of the uterine cavity, or the use of the curette. Between July, 1882, and July, 1890, Dr. Apostoli had applied electricity 11,499 times to 912 patients, including, besides the fibroids, 133 cases of endometritis alone, and 248 of the same affection complicated with pelvic inflammation. Only 5 deaths attributable to the method itself had occurred, including the case of fibroid above noted. Dr. Cutter (New York) described the history of the application of electricity to myoma. He said that we did not know all about the currents of electricity that flowed through the body. When he inserted needles into a tumour and connected them with a battery he expected that the current would flow through the tough tissues of that tumour and influence the heart, in fact, the nerve centres themselves, for in them it was his belief that the therapeutic action was due by influencing the processes of nutrition, so that the tumour was eventually absorbed by Nature's own method. The process was decidedly dangerous, and required experience. As long as large fibroid tumours of the uterus existed, women should have the benefit of galvanization, combined with judicious selection. Several other speakers testified to the value of electrolysis in fibroid of the uterus, not without noting its difficulties and dangers. The general opinion, however, was not enthusiastically in favour of electrolysis for myoma, Dr. Brose and others pointing out that enough time had not elapsed to prove cure, nor was the most experienced man's diagnosis always sound on alleged cases of incipient fibroid disease. Uterine myoma, again formed the subject of debate on another day, when an interesting discussion took place between Dr. Martin and Mr. Lawson Tait on the relative importance of removing Fallopian tube or ovary

for the cure of fibroids. Dr. Martin declared that his experience showed that excision of the tube was insufficient.

*Antiseptics in Midwifery.* Dr. Slaviansky introduced the subject. He brought forward statistics of 76,648 cases from different institutions, taken during the last four years; in all cases antiseptics had been employed. No cases of poisoning by the chemicals used for the purpose had occurred. From 1875 to 1885 Dr. Jacob had had 19.22 per cent. morbidity from puerperal fever, including 1.14 per cent. deaths. Since then the statistics were as follows:—

	Puerperal Morbidity.	Puerperal Mortality.
Percentage in 1886 ...	9.43 ...	0.48
" 1887 ...	10.04 ...	0.44
" 1888 ...	8.18 ...	0.33
" 1889 ...	6.90 ...	0.28

Antiseptics are now very generally employed in Russia, and in consequence the morbidity and mortality are falling in other institutions than those included in the above statistics. With antiseptic precautions, the students and midwives need in no way endanger the patients. According to the stringency of the method of antiseptics employed, not only was the mortality and morbidity diminished or kept stationary, but the pathological and operative results were affected in like manner. Lastly, under antiseptics, large lying-in hospitals answer better than smaller institutions. Sublimate was the most satisfactory agent in Russia. Dr. Stadfeld (Copenhagen) said that antiseptic treatment, thoroughly carried out, justified the existence of lying-in hospitals, not only for teaching, but for the highest philanthropic purposes. The principle according to which a system of branches, under the care of local midwives, is added to obstetric hospitals was now unnecessary and actually dangerous. The introduction of the antiseptics into obstetrics had been also very salutary for the newborn children. In private practice the midwives must keep clothes and apparatus aseptic; scrupulous cleanliness must be insisted upon. It was very desirable that the method should be simplified, so that midwives could understand it, and that antiseptics, readily prepared, be freely supplied. The midwife should not undertake the care of any patient after delivery. The midwife must see that the person and clothes of the patient was as clean and aseptic as her own. During labour the midwife must interfere with the case as little as possible. All cases of puerperal fever, even if slight, must be immediately reported to the sanitary authorities, by the midwives as well as by the physicians. When several cases occurred under the same midwife a thorough examination of all circumstances, and possibly a temporary suspension of the midwife, was necessary. Dr. Kritsch divided the history of antiseptics, as employed against the risk of puerperal fever, into three epochs: the experimental period the era when the system was overdone (too strong solutions being used) and the present stage when moderation was in practice. No local treatment was needed for healthy women; in mild forms of fever (*Resorptionsfieber*) only expectant treatment was called for. In high fever irrigation of the uterus was necessary, but only as a part of the treatment. Irrigation was never to be relied upon alone when fever had really set in. Dr. Priestley noted the fearful mortality which had occurred in days within his own memory, before antiseptics. To Sir Joseph Lister, whom they had heard in the large theatre that day, must be attributed the improvements now under

discussion. Continental obstetricians had taken the lead, and nothing spoke so strongly in favour of the antiseptic system than the good results in Russian hospitals compared with the high mortality outside those institutions in Russia. Dr. Priestley regretted that Dr. Galabin had found 1 in 4,000 injections of sublimate inefficient, and so recommended 1 in 2,000, for Dr. Priestley had on different occasions seen serious results follow the injection of the stronger solution.

*Vaginal Extirpation of the Uterus.*—Dr. John Williams said that cancer of uterus was in itself an indication for total extirpation of that organ, and yet all such cases were not fit subjects for the operation. Total extirpation should be undertaken with a view to radical cure only; it was of too grave and mutilating a character to be adopted as a merely palliative measure. Dr. Williams then noticed his views on the manner by which cancer spread, and advocated supravaginal amputation of the cervix as the most justifiable operation in most cases. Present statistics were insufficient to warrant the positive conclusion that the results after total extirpation were better than those after supravaginal amputation of the cervix. Our aim should be to recognise this transition state to distinguish cases in which cancer was limited to the uterine tissues from those in which it had passed just beyond them where there was no appreciable indication of the parametric tissues and in which, nevertheless, early recurrence after operation was certain. Vaginal and rectal examinations under anaesthesia were required. Glandular enlargements were sometimes situated at too great a distance from the uterus to be discovered when the intervening tissue was yet healthy. When it was found that the whole thickness of the uterine wall or of any part of it in the cervix or in the sides of the body where the broad ligaments were attached was involved, should total extirpation be resorted to or did the operation, undertaken under such conditions, offer any hope of radical cure? These questions were submitted for debate. Dr. S-chanta was against amputation of the cervix. In seventeen cases he found that the body of the uterus was involved, the cervix being the primary seat of disease. He therefore favoured total extirpation. Dr. Pozzi was of a similar opinion, preferring the complete operation, but said that extirpation must not be performed when the disease had passed beyond the limits of the uterus. He strongly deprecated the pulling downwards of the fundus in the course of the operation, as the diseased cervix then fouled the peritoneum. He also insisted on ligature of vessels, objecting to forcipressure. Dr. Landau preferred forcipressure; it permitted of a more thorough removal of a part. He had performed thirty-five operations with three deaths. Dr. Sajaitzky gave a history of the operation in Russia. With antiseptics, total amputation was not dangerous. Schoder, Fritsch, and Martin's method was the best. Damage to the bladder and ureters could always be avoided. Dr. Martin favoured complete extirpation in cancer, and also in other diseases which kept the patient from work. He only operated when the uterus could be totally removed. He attached little importance to the variety of total extirpation employed. He closed the wound, and did not drain. Dr. Kaltenbach said that the differences of opinion were not on really essential matters. Nobody could prophesy if, how, when, and where the cancer would recur. He closed the peritoneum. Dr. Duvelius did total extirpation in all cases of cancer. Dr. Czerny



(Heidelberg) said that vaginal extirpation would remain in practice as long as medical treatment for cancer remained undiscovered. When the parametrium was infiltrated, the sacral method of operating was needed. Dr. Frankel described a case of recurrence which did not take place till eight years after the total extirpation. M. Pean said that total extirpation was possible without any ligatures. Forcepspressure answered admirably.

*Induction of Premature Labour.*—Dr. Theophilus Parvin introduced this discussion. He mentioned all the conditions under which induction of premature labour was needed, such as obstinate vomiting, renal, cardiac, and pulmonary disease, and exhibited tables illustrating the question. The chief condition, however for which labor was induced was pelvic deformity, about seven-eighths of nearly 1,000 cases tabulated by Dr. Parvin having contracted pelvis. The relative merits of this method and Cesarean section in cases of deformed pelvis were hard to decide, and greatly depended upon the amount of deformity and on the qualification, experiences and skill of the obstetrician or surgeon who undertook each case. Dr. Parvin therefore dwelt rather on cases where labour was induced for visceral disease or acute infectious affections. In many such cases the practice was good, in others interruption of pregnancy was more dangerous than its continuance. Dr. McCan discussed the ethics of the question. Once the results to mother and child were unfavorable. Since the introduction of antiseptics the mother ran little more risk than was entailed in normal labour. The safety of mother and child was very differently affected, now as before. Dr. McCan noted how in England the safety of the mother was first considered; but this question now stood in a new light, for, till recently, perforation which killed the child, usually saved the mother. Cesarean section being very dangerous to both. Now the latter operation often saved both. Dr. McCan did not think that too little stress should be placed on saving the child, and at the same urged that, no matter how positively we might lay down the indications in any given case, it was the woman herself who had finally the right to determine what amount of unnecessary danger she should run for the sake of her unborn child. Cesarean section should never be forced on a patient, and should only be performed when after its relative risks and advantages and its alternatives, above all the induction of premature labour, had been fully explained to the patient, the latter ultimately preferring section. Induction of premature labour was not without danger. Antiseptics greatly diminished the risks, but when labour continued for three or four days perfect antisepsis was difficult to ensure. Dr. McCan lastly entered into the technical details of the operation. He thought that dilatation with the fingers was preferable to the use of tents or even of the bougie, and recommended that method whenever practicable. Dr. Calderini (Parma) held that, in the interests of the child, labour should not be induced when the conjugate vera in rachitic pelvis was under 75 millimetres. With special precautions, the number of children born alive might be increased. Antiseptics had greatly increased the value and diminished the risk of this method. The best way of inducing labour in cases of contracted pelvis was the use of hot douches through a speculum, and the introduction of a bougie as far as the fundus. When labour was induced for visceral disease, it was often necessary to add to the above puncture of the mem-

brane. Statistical tables which Dr. Calderini exhibited showed that turning, induced labour, symphysiotomy, forceps, perforation, Porro's operation, and Sanger's Cesarean section represented increasing grades of danger to the mother, the first being the least dangerous, the mortality of the child being almost reversed in the above list, excepting that perforation was, of course, always fatal. In the interests of the child preference should be given to Cesarean section, but the risk to the mother was still great, and in practicable cases, induced labour should be preferred. Although 75 millimetres was the maximum in rachitic pelvis, induced labour might be justifiable in pelvis with a conjugate of as much as 85 millimetres, when other forms of distortion existed. Dr. Dohrn (Königsberg) was of the same opinion as to pelvic measurements. The value of induced labour was not lessened by the improved results of craniotomy and Cesarean section.

*Abdominal Surgery.*—Amongst the papers relating to abdominal surgery was a communication from Dr. E. W. Cushing, of Boston U.S., on Drainage after Abdominal Section. He laid down the following indication for drainage. 1. The presence of freshly separated adhesions or of voluminous pedicles, or of rents and incisions in the pelvic peritoneum which required many stitches, in fact, any condition which might probably lead to oozing of bloody fluid. 2. The fact that pus or the contents of cysts, or much blood, urine, or fecal matter had escaped into the abdominal cavity; such a circumstance being always followed by free irrigation with pure hot water and the use of drainage. 3. Perforation or incision of the intestines or bladder during operation, or a sloughy condition which made perforation probable. 4. The presence of masses of exudation or stiff capsules whence diseased structures have been enucleated, capsules which will not fall in and so allow of the accumulation of fluid. 5. Any condition, such as shock or weakness, which required very rapid termination of a difficult operation, in which case the abdomen will be full of hot water. There were no special contraindications to drainage. The general feeling of the Continental authorities was strongly against the drainage tube, and in favour of antiseptics, Professor Schroder representing this current of opinion in its extreme form. Mr. Tait, on the other hand, denied the value of the results of the cultivation of germs on dead subjects, and observed that the proportion of cases where he used the tube had increased. He employed it in old subjects over sixty, and in exhausted young patients. The Continental operators chiefly relied on antiseptic lotions and rapid operating, they made free abdominal incisions, placing no faith in the virtues of a short wound.

*Abdominal Sections by Professor Martin.*—On Wednesday morning, August 6th, Dr. Martin performed three abdominal sections at his private hospital in the Elsassstrasse before a company of distinguished foreign operators. Each patient was chloroformed in her ward, then carried upon a couch with wheels to a room where the abdomen was thoroughly washed with sublimate, the pelvis shaved, and the urine drawn off. The visitors, at the request of the operator, entered the operating theatre divested of their coats and waistcoats. The operator and his assistants were in a yet more complete undress uniform. The patient, when brought into the theatre, underwent a fresh washing, the juice of a lemon being lastly squeezed over the abdominal integuments. The operator sat between the patient's thighs, the chief assistant



also sitting was placed to the patient's left. In all three cases the operation was performed with great rapidity, and the abdominal incision was made very long, almost reaching the umbilicus, although in no case was a large tumour present. The wound was also closed quickly by means of stout catgut sutures, not placed closely together. In the second case a suppurating tube was removed from the right side. In the third an intraligamentary ovarian cyst was enucleated. The first operation was of great interest. An interstitial myoma of moderate size was present, the uterus and its appendages were drawn out of the wound, and the vessels of the broad ligament temporarily secured by means of large pressure forceps. Then a vertical incision was made, extending down the back and front of the uterus, passing over the fundus. The myoma was next enucleated. The capsule was treated after Dr. Martin's special method, none of its substance was cut away, but its raw surfaces were united by deep, and its cut edges by superficial, catgut sutures. The forceps being removed the sutures and appendages were then replaced in the pelvis. In none of the cases was flushing or drainage employed. The instruments were immersed on a 2 per cent. solution of carbolic acid. For the washing of the patients and the operator and assistants a 1 in a 1,000 solution of sublimate was employed. The spray was not used. Dr. Martin's hospital is a model of elegance, comfort, and cleanliness.

*Exhibits.*—Many anatomical and pathological specimens were exhibited. Amongst the best were a series of Frozen Sections, prepared by Dr. Leopold (Dresden), showing the relations of the parametrium to the pelvic walls and organs, and the anatomy of extra-uterine pregnancy. Dr. Barbour's admirable demonstrations on anatomical preparations, elucidating the later periods of pregnancy and the relations of the uterus, etc., during and after labour were listened to with great interest. Of course there were plenty of deformed pelvis. Dr. Neugebauer, jun. (Warsaw), demonstrated several such specimens, and showed himself to be a most able oratorical exponent of a peculiarly difficult subject.

#### SECTION OF OPHTHALMOLOGY.

(Continued.)

*Test for Colour Vision.*—The following abstract of the paper and discussions will give some idea of the proceedings. On August 6th Dr. Grossmann (Liverpool) exhibited a new apparatus for colour vision, the object being to detect very small scotomata, and establish the normal standard for the perception of small coloured lights. Dr. Angstein (Bromberg) regarded Dr. Grossmann's tests as the most practical ever published, if only manufacturers could construct it more satisfactorily. Professor Ræhlmann exhibited curves which he had obtained for the perception of colour in normal and colour-blind eyes.

*Adaptation in Diseased and Healthy Eyes.*—Dr. Schirmer (Göttingen) read a paper on this subject. He had found the albino light sense equal to that of the pigmented eye, and that of the night blind was also equal to the normal after prolonged adaptation. Night blindness he considered with Freitel to be a disease of adaptation, which depended upon some as yet unknown process in pigment epithelium. Professor Uthoff (Berlin) opposed these views, as he had found the light sense defective in night blindness. Dr. Graening (New York) also spoke. Dr. Schirmer, in reply, suggested that

Professor Uthoff had not given sufficient time for adaptation before testing the light sense; from twelve to twenty-four hours is sometimes necessary.

*New Ophthalmoscope.*—Dr. Lyden Borthen (Trondheim) exhibited a new refraction ophthalmoscope.

*Perimetric Tests.*—Dr. Bjerrum (Copenhagen) read a paper on addition to the ordinary perimetric tests and fields of vision in glaucoma. He uses very small test objects at considerable distances, and by this means could detect defects which escape ordinary perimetric test. He had thus found the field affected in the early stages of glaucoma. Mr. Berry (Edinburgh) fully approved of Bjerrum's method; it was useful in glaucoma and in amblyopia from toxic as distinguished from inflammatory lesions of the nerve. In this Professor Hirschberg (Berlin) agreed.

*Refraction.*—Dr. Ramos (Mexico) contrasted the refraction as found by him in Mexico with that found by Cohn and others in Europe. The chief point was the almost complete absence of myopia in the native race. It occurred among half-breeds, but not to the same extent as among the Europeans living in Mexico.

*Other Papers.*—Dr. Arninski (Essel) read a paper upon the relation between the far point of man's eye and his occupation, in which he regarded the hypermetropic as the normal eye. Dr. Giebrecht (Ghent) read a paper upon Daltonism in connection with the examination of railway servants and seamen.

*Sympathetic Ophthalmia.*—On August 7th a discussion on this subject was opened by Mr. Brailey (London) in a speech which gave detailed description of the pathology of the eyeballs which excite and of those which suffer from sympathy. The exciting eyes exhibit a blastic uveitis, with clusters of cells in iris, ciliary body and choroidea, but the chorionic capillars and the pigment epithelium generally escape. Sympathy occurs after serous and suppurative disease also, and has been produced by non-perforating tumours. In the sympathising eye the disease has begun with papillitis in 10 per cent. of cases. In 5 per cent. it has not gone beyond papillitis, but generally it is a uveitis of a serous kind with keratitis punctata and high tension. It seems to travel through the nerve sheaths and then either along central vessels to papilla or along episcleral tissue to iris. It is hard to explain its occurrence in cases of non-perforating tumours, and its general non-appearance after suppuration, if it is caused, as many hold, by a bacillus. As to prevention, a timely enucleation is the best plan and succeeds, unless the cause lies in the socket external to globe, but evisceration, resection of the nerve, and iridectomy even have done good. If glaucoma exists in the second eye an iridectomy is useful. Professor Deutschmann distinguished between sympathetic irritation and sympathetic inflammation, and gave a brief account of his experiments upon rabbits. He succeeded, as is known in producing sympathetic inflammation, beginning in the optic papilla, but nearly all the animals died with meningitis. In human eyes removed for causing sympathetic disease, and in the sympathising eyes also, he had always found staphylococci, but he did not assert that these cocci were the only cause of the disease. Possible they assisted in the elaboration of a chemical poison which was the real toxic agent. There seemed to be several possible routes for the inflammatory process from the globe to the optic nerve sheath or *vice versa*, namely, the suprachoroidal space, the space round the central vessels, and the space

beneath the capsule of Tenon, but in all cases it travelled from one eye to the other by means of the optic nerve sheath. Dr. Darien (Paris) advocated Abadi's treatment of electric cauterisation.

Mr. Cross (Bristol) spoke upon the prevention, and expressed his disapproval of the operation known as Mules's which, in his experience, had led to the occurrence of sympathy. Dr. Parisotti, Wickerniewicz (Posen), and Fulton (St. Paul) spoke. Mr. Berry (Edinburgh) considered that Deutschmann had not proved his case. In fourteen eyes removed by him for exciting sympathy, no milder organisms could be detected. Professor Colin (Breslau) described a case of simulation of sympathetic blindness. Mr. Story (Dublin) warmly supported Deutschmann's opinions, but thought the general septicemia that occurred in his experiments lessened their demonstrative value. Objectors would always exist until he had produced sympathy without it. He had observed meningeal symptoms in his own practice. Iridectomy had never succeeded in the second eye, but he had been most successful in treating such cases by the method proposed by the late Mr. Critchett in the *Ophthalmic Review* some years ago. Dr. Ceau (Bucharest) spoke. Professor Aaab (Zurich) had found bacilli in eight out of twelve eyes enucleated for panophthalmitis. Dr. Rosenmeyer (Frankfurt) had seen atrophy occur from retrobulbar inflammation due to sympathy without any papillitis. Dr. Hill Griffith (Manchester) stated that Mule's operation was most successful in properly chosen cases. Dr. Deeks (New York) opposed Deutschmann's views, as the inflammation he had produced in the second eye was merely a part of a general pyemia. Dr. Levy (Strassburg), Germann (St. Petersburg), Logetshnikoff and Pelner (Bern) spoke, and Drs. Brailley and Deutschmann replied.

*Iridocyclitis after Influenza, etc.*—Professor Lagneur (Strasbourg) read a paper upon iridocyclitis after influenza. Dr. Gallemaerts (Brussels) exhibited the apparatus of Léon Gérard for the diagnosis of magnetic foreign bodies in the eyeball. Professor Hirschberg discussed the communication.

*Endothelium of Anterior Chamber.*—Dr. Nuel (Liège) read a paper upon the endothelium of the anterior chamber, and exhibited microscopic specimens showing stomata in the endothelium covering the anterior surface of the iris of rabbits.

*Sympathetic Ophthalmia.*—Professor Rosmini (Milan) presented a communication on the treatment of sympathetic ophthalmia and of trachoma.

*Treatment of Acute Panophthalmitis.*—Dr. Boe (Paris) read a paper on the treatment of acute panophthalmitis. He had succeeded in isolating a streptococcus which produced contagious panophthalmitis. He advised evisceration and antiseptic injections as preferable to enucleation. Professor Pflüger (Bern) and Dr. Cleibret (Clermont Ferrand) discussed this paper. The latter strongly supported the views of MM. Abadi and Darien as to the hypodermic injections of perchloride of mercury in all cases where mercurisation is desirable.

*The Vitreous in Glaucoma.*—Dr. Haensell (Paris) read a paper on the pathology of the vitreous humours in glaucomatous eyes. The author's conclusions are that the glaucomatous process consists in a hyaline degeneration which invades gradually the cells of all the intraocular tissues, and renders them incapable of performing their vital functions. This degeneration commences in

the papilla, and spreads thence to the vitreous. It precedes the states of high tension.

*Treatment of Choroid-Retinitis.*—Dr. Darien (Paris) read a paper on a new treatment for central choroido-retinitis and choroiditis disseminata. The treatment consists in hypodermic injections of perchloride of mercury. Drs. Cleibret and Van Millingen spoke in approval of the treatments, and Dr. Darien replied.

*Coloboma of Choroid.*—Dr. Talko (Russia) reported a case of bilateral coloboma of the choroid with normal iris, exhibiting drawings of the eye.

*Fatigue of Visual Field.*—Dr. Willbrand (Hamburg) read a paper upon fatigue of the visual field, and showed charts of the field of vision in illustration of his paper. In the discussion, Professor Pflüger drew attention to the many possible sources of error in examining for such defects.

*Formation of New Eyelid.*—Dr. Wickerniewicz (Posen) described a plastic operation for forming a new eyelid after extirpation of a lid tumour.

*Eye Lotions.*—Dr. Franke (Hamburg) read a paper upon the infection and disinfection of eye lotions. He had found no agent equal to corrosive sublimate.

*Choroiditis and Osteitis Deformans.*—On August 8th, Mr. Jonathan Hutchinson (London) exhibited pictures of a form of choroiditis occurring in the subjects of osteitis deformans (Paget's disease), and also of a peculiar form of serpiginous, central and symmetrical choroiditis. The latter could not be attributed always to syphilis.

*Ultra-Violet Rays in Spectrum.*—Dr. Widmark (Stockholm) presented a communication on the action of the ultra-violet rays of the spectrum. The author has experimentally proved that the irritation caused by electric light is due to its action on the media, and not to its effect upon the retina, and he has established that this action is due to the ultra-violet rays.

*Exhibits.*—Dr. Javal (Paris) exhibited a Biconical Lens. Dr. Valude (Paris) exhibited a case of *Verru Toriques*.

*Ophthalmometry.*—Dr. Sulzen (Winterthur) read a paper upon the bearing of the angle, to ophthalmometrical measurements, and its determination by means of the ophthalmometer. Professor Pelüger (Bern) gave an account of some ophthalmometrical observations. In a discussion on ophthalmometry, Professor Fuchs (Vienna), Dr. Swan Burnett (Washington), Dr. Javat (Paris), and Professor Cohn (Breslau) expressed their favourable opinion of the ophthalmometer.

*Retinal Changes in Hydrophobia.*—Dr. Falchi then requested Professor Helmholtz to take the chair, after which he read a paper upon the retinal changes in hydrophobia, produced experimentally.

*The Optic Nerve.*—On August 9th, Dr. Bernheimer (Heidelberg) read a paper upon an anomaly in the optic nerve, and upon the anatomy of the roots of the nerve.

*Siderosis Bulbi.*—Dr. Bunge (Halle) read a paper upon siderosis bulbi, and exhibited specimens.

*Cataract Extraction.*—Dr. Bono (Turin) read a paper upon 1,250 cases of cataract extraction. In the last 200 only 1 per cent. were lost, and 7 per cent. were but partially successful. The operation done was that of Spermio without iridectomy. In the discussion, Dr. Wickerniewicz expressed himself as daily more satisfied with the results of his method of washing out the anterior chamber.

*Microscopical Sections.*—Professor Uhthoff exhibited microscopical sections and drawings of various Pathological States of the Optic Nerves.

## SECTION OF LARYNGOLOGY AND RHINOLOGY.

(Continued.)

**Paper and Demonstrations.**—On Wednesday, Aug 6th, Dr. Theod. Flatau (Berlin) exhibited a series of microscopic specimens of injected tissues illustrating the free communication between the lymph channels of the nose and those of the membranes of the brain. Dr. Micheal (Hamburg) read a paper on melanosarcoma of the nose, and one on a peculiar complication of tracheotomy in elderly people. Dr. Bresgen (Frankfurt) commended methyl violet in the treatment of various throat and nose diseases. Dr. Roe (U.S.A.) read an interesting paper on the application of the aseptic and antiseptic methods in nasal surgery, in which he contended that these should always be adopted. After the papers for the day were finished, Dr. H. R. French, of Brooklyn, N.Y., gave a demonstration in the Urania Theatre on the action of the glottis in singing. Selected specimens of over a thousand photographs of the larynx in action in different singers, were projected on a screen by the oxyhydrogen lamp, and served to demonstrate how much more complicated the appearances are than is generally imagined, and how different in different people.

**Intubation of Larynx.**—On Thursday, Aug. 7th, the day's proceedings commenced with a prolonged and interesting debate (in conjunction with the Sections for Diseases of Children) on intubation of the larynx. In this Drs. O'Dwyer, Ranke, Northrup, Hörk, Schwalbe, Casselberry, and Massei took part. M. Bouchut then gave a demonstration with an excised larynx of his new tubes for intubation, which are stated to have the great advantage of being easily retained in position. They are made by Mathieu, of Paris.

**Surgical Treatment of Laryngeal Phthisis.**—Professor Heriug (Warsaw) read a paper entitled Can phthisis of the larynx be perfectly cured by surgical treatment? and illustrated his paper by preparations.

**Deviations of Nasal Septum.**—Professor W. Chapman Jarvis (New York) then exhibited and explained his very ingenious and original instruments (made by Ford, New York) for operation on deviations and spurs of the nasal septum. They consist of variously-shaped planes, gouges, trephines, and chisels made to revolve by an electric motor, and constitute a great advance on all previous attempts in this direction. He also exhibited a nasal clamp for performing nasal septum operations without loss of blood.

**Motor Innervation of Larynx.**—In the afternoon a combined sitting was held with the Sections of Neurology and Physiology, in order that Dr. Felix Semon and Professor Victor Horsley might demonstrate the facts they had ascertained as to the central and peripheral motor innervation of the larynx. The experiments were successfully performed, and were witnessed by some 500 members of the above Sections.

**Treatment of Laryngeal Phthisis.**—On Friday, August 8th, the proceedings commenced with a debate on the treatment of laryngeal phthisis, in which Drs. Steinhmann and Störk took part, as well as many others. Professor Krause gave several members the opportunity of seeing his method of treatment of laryngeal phthisis carried out at his "Poliklinik." In one new case, the extreme dysphagia and hoarseness were marvellously relieved immediately on the cauterizing of the infiltrated tissues, and he showed cases in which the local lesions had been completely cured, leaving cicatrices.

**Syphilis of Air Passages.**—A discussion on syphilis of the upper air passages was led off by Drs. Schrötter and Löfferts.

**Picnic.**—In the afternoon the Berlin Laryngological Society entertained the Sections to an enjoyable water picnic on the lakes of the Havel river, near Potsdam.

**Acute Infections Inflammations of Pharynx and Larynx.**—On Saturday, August 9th, the final formal subject of debate, acute infectious inflammations of the pharynx and larynx, was ably introduced by Drs. Massei and Moitz Schmidt, and a good discussion ensued. The remaining papers were then read, or taken as read.

**Clinical Demonstrations.**—In the afternoon many of the members visited Professor B. Fränkel's polyclinic, where Dr. Rosenberg demonstrated his method of treatment of laryngeal phthisis with some cured cases, and F. Braun (Trieste) illustrated the practice of massage in nose and throat disease.

**Exhibits.**—Among other things of interest (on view in the museum) were Professor Tobold's set of benign and malignant tumours of the larynx, executed in the highest style of art; Dr. Hennig's studies in oil of nasal, pharyngeal and laryngeal diseases; Dr. Heymann's series of preparations illustrating the anatomy and pathology of the accessory cavities of the nose; various pathological specimens exhibited by Professor B. Fränkel; and some complete collections of all the newest and best apparatus for laryngological and rhinological work.

## SECTION OF DERMATOLOGY.

The Section was constituted on August 4th, under the presidency of Dr. Lassar (Berlin). Its subsequent meetings throughout the week were held in various localities, and ultimately *all fresco* in the exhibition grounds with the pleasing accompaniment of tobacco. Messrs. Cashary (Königsberg), Dontrelepoint (Bonn), Köbner (Berlin), E. Lesser (Leipzig), G. Lewin (Berlin), Neisser (Breslau) Unna (Hamburg), and A. Wolff (Strassburg) acted as members of committee. English dermatology was represented by Hutchinson, Malcolm Morris, Crocker, Colecott Fox, Mapother, Pringle, Brooke (Manchester) Taylor (Liverpool), and Abraham; while Sherwell, Bulkeley, Robinson, and Morison represented America.

**Inflammation, Skin Affections, etc.**—The business of the Section was inaugurated on August 5th, by the President in a short paper on the treatment of the inflammatory affections of the skin, but no discussion ensued. The subsequent paper on the prognosis and treatment of chronic gonorrhoea in both sexes by Dontrelepoint, although possessing little or nothing of dermatological interest, provoked considerable discussion, the contributions of Jullien (Paris) and Sinclair (Manchester) being of special interest.

**Medicinal Rashes.**—On August 5th, Professor Unna introduced the subjects of the nature of medicinal rashes. Very elaborate and valuable papers were read by Colecott Fox, and Brooke, who were the official reporters. The discussion which followed was animated, and was participated in by Leboir who cited rare forms of eruption from iodide of potassium, salicylate of soda, and sulphonal; Behrend, Crocker, Köbner who dwelt on quinine rashes; and Dubois-Havenik (Brussels). Hutchinson, Fox, and Crocker exhibited several illustrative water-colour drawings of interest.

**Tertiary Syphilis.**—On August 6th, various questions relative to the conditions which cause the development of tertiary manifestations, and to the

treatment of syphilis in its different stages, were raised by Kühner, Haslund (Copenhagen), Leloir, and others, but no new lights were thrown on this rather threadbare subject.

*Leprosy.*—In the afternoon, Mr. Jonathan Hutchinson opened the debates on leprosy, which proved the most animated and interesting throughout the week. He announced his entire acceptance of the bacillary theory of the etiology of the disease, and once more enunciated his well-known "fish theory," supporting it by numerous cogent and well-arranged facts, and by much persuasive eloquence and plausible reasoning. Various considerations opposed to Hutchinson's views were adduced by Arning, Petersen (St. Petersburg), Schnusler, and Kaposi. Dr. Leloir expressed himself as totally opposed to the "culinary" theory, and on the assumption of its contagious nature, as in favour of the establishment of leper colonies. Dr. Abraham asked for some explanation of the now notorious Dublin Cave, and advocated the claims of the National Leprosy Fund. Mr. Hutchinson's reply was able and characteristic.

*Pigmentations of Skin.*—A tedious and barren discussion on the pathogenesis of pigmentations and discolorations of the skin occupied the forenoon of August 7th. In it Drs. Caspary, Kaposi, Ehrmann (Vienna), Jarisch (Innsbruck), Kromeyer (Vienna), and Blaschko took part. The only general deduction to be drawn was that direct nerve influence is now considered to be a much less important factor in the etiology of abnormal pigmentation than was formerly maintained.

*Lichen Ruber Acuminatus.*—An interesting and exhaustive paper by Dr. Adole Havas (Budapesth) on the so-called lichen ruber acuminatus of Hebra citing two cases, resulted in the admission by Dr. Neumann (Vienna) of the identity of the disease with the pityriasis rubra pilaris of Devergie, the existence of which as a morbid entity was accepted by the great majority of dermatologists at the Paris Congress of 1889, and must now be considered as fully established.

A writer in the *British Medical Journal* suggests that a pencil or stick for application to chafed and irritated surfaces, or to skins especially susceptible to insect bites, etc., may be made by adding two per cent. of coccoaine to the ordinary cocoa butter pencils, giving immediate relief when rubbed over the spot.

M. Loison (*The Lancet*, June 21st), has devised a simple plan for detecting terpin in the urine in very small quantity, based on the fact that this substance, when treated with hydrochloric acid, evolves a hydrocarbon which colors chloride of antimony red.

Dr. J. William White (*Medical News*, June 14) recommends the following mixture in capsules, for the treatment of acute urethritis:—

Salol,	gr. iiii ss
Oleoresin of eubebæ,	gr. v
Balsam of copiava (Para),	gr. x
Pepsin,	gr. j. M.

The discharge, in two-thirds of the cases, ceased within a week. In the majority of cases he also recommended an injection of gr. ij-x of sulphocarbonate of zinc in a 10 to 15 per cent. solution of peroxide of hydrogen.

## CHOLERA INFANTUM.

Twenty deaths last week from cholera infantum, and sixty-eight from other affections of the gastro-intestinal apparatus, warn us that the summer is here and the annual slaughter of the innocents has commenced. Although there have been radical changes in the current views as to the pathology of this group of diseases, the effects upon the annual mortality are not as yet very marked. Therapeutic applications have been made, but have not as yet been generally accepted by the slow-moving body of the profession. Two ideas are to be kept in mind concerning the summer diseases of children; intestinal sepsis and the regulation of the diet. It is instructive to glance over the pages of the older text-books, such as the earlier editions of Meigs and Pepper, and note the blind floundering of the therapist before the development of the germ theory and the researches upon ptomaines gave us a definite working theory. The intestinal canal of the infant is a breeding ground for countless microzymes, good, bad, and indifferent, which carry on their operations unceasingly; when the combined influences of tropic heat, bad hygienic surroundings and unwholesome food lower the vital forces of the child to a certain point, these organisms, or their toxic products, pass through the ungarded portals and manifest their presence in the body by their appropriate effects. The first indications of abnormal action in the intestinal canal, undue fetor, fermentation or diarrhoea, should be promptly met by the administration of such substances as will correct the difficulty and put the prime vie in the state of asepsis. A number of agents have been employed for this purpose, and good results have been reported from resorcin, naphthol, mercury, salicylic acid, subiodide of bismuth and solol. It is quite natural for the physician who has experienced the great benefit of intestinal antiseptics to become partial to the agent which has first afforded him this great advantage over his previous practice. Nevertheless, there is one of these agents which must be better, taken all in all, than the others, and the best is the sulpho-carbolate of zinc. It is free from the unpleasant taste of some, the irritant qualities of others, the toxic possibilities of others; it does not interfere with the digestive functions, and it is at least equal in efficiency to all its rivals. It possesses all the advantages, and no disadvantages. In the gastric cases it relieves the vomiting at once. In dysenteric cases it may be injected into the bowels with the best results.

For children, the sulpho-carbolate is best given in doses of one-half to two grains, repeated every one to four hours; the frequency being regulated by the effect upon the stools, and the

object being to keep them free from fetor. In dysenteric cases, five to ten grains may be injected in four ounces of hot water.

Of equal importance is the diet. Thanks to Vaughan, we know what an egregious mistake we made in pinning our faith upon milk. That this substance should have attained its undeserved place in the dietary of the sick is an illustration of the shallow reasoning upon which much of our practice is still founded. We recognize the absurdity of the time when saffron was given for jaundice because both were yellow; but this was a trivial matter besides the use of that summary of all that is undesirable in a sick child's diet—milk. Variable in composition; disease transmitting; liable to adulteration; prone to decomposition; apt to absorb disease; of the utmost difficulty to preserve; a culture ground for almost every known disease-germ; if there is a bad quality which a food can have which may not be found in milk, the writer knows it not.

Our preference is decidedly in favor of the prepared infant foods. The question of their being patented or not we leave to those who look upon such matters as of greater importance than the lives of their little patients. The superiority of those foods which have been deprived of their innutritious constituents and brought into such a state as to be readily digested by the child, is incontestable. Reed & Carnrick's, Nestle's and Mellin's foods, with the raw, scraped beef and the raw white of an egg dissolved in ice-water are forms of food for sick children which will meet every indication of the digestive requirements and idiosyncrasy of taste. Add to them Bovinine, a food and a stimulant, and it will be difficult, indeed, to find a case which requires an addition to this list. To these foods and the antiseptic which he has recommended for the past four years, the writer attributes a degree of success in the management of summer complaint which he never obtained previously, and which leaves little opportunity for improvement.—*Times and Register Editorial—Dietetic Gazette.*

For Fissure of the Nipples, the following application is recommended (*Amer Pract and News*):—

R. Salol,	5j.
Ætheris,	ʒssj
Cocain, hydrochlorat.,	gr. ij
Collodi,	ʒv. M.

For tender feet, *The Dixie Doctor* recommends a mixture of two quarts of cold water, two tablespoonfuls of ammonia, one tablespoonful of bay rum. Sit with the feet immersed for ten minutes, gently throwing the water over the limbs upward to the knee. Then rub dry with a crash towel and all the tired feeling is gone. This is good for a sponge-bath also.

Beef juice is more tasty and appetizing for the invalid than beef tea (Mrs. S. T. Rorer, *Dietetic Gazette*, June 1890.) It may be made as follows: Broil a half pound for just a moment over a quick fire, then score it thoroughly, put it in a lemon squeezer, and press the juice into a cup, add a grain of salt, stand the cup in hot water for a moment until the juice is warm, and use it immediately.

Among new drugs recently investigated are two of much promise, Cocillana and Naregamia Alata. The evidence thus far obtained from clinical experience would indicate that these remedies may prove an important addition to the expectorants and respiratory stimulants now employed. In the spasmodic cough of acute bronchitis, in the hacking cough of phthisis and wherever there is marked interference with the respiratory function through accumulation of secretion of the inflamed membranes, these remedies are likely to prove efficient. Messrs. Parke, Davis & Co., who have introduced these remedies, offer samples of them to physicians desiring to test them clinically, also reprints of articles concerning them, free of charge.

The habitual drunkard in Norway or Sweden renders himself liable to imprisonment for his love of strong drink, and during his incarceration he is required to submit to a plan of treatment for the cure of his failing which is said to produce marvelous results. (*Scientific American*, June 21st.) The plan consists in making the delinquent subsist entirely on bread and wine. The bread is steeped in a bowl of wine for an hour or more before the meal is served. The first day the habitual toper takes his food in this shape without repugnance; the second day he finds it less agreeable to his palate; finally he positively loathes the sight of it. Experience shows that a period of from eight to ten days of this regimen is generally more than sufficient to make a man evince the greatest aversion to anything in the shape of wine. Many men after their incarceration become total abstainers.

Dr. James Finlayson, referring to the occurrence of obscure febrile attacks in the course of Chorea, referable to endocarditis (*Archives of Pediatrics*, July, 1890), holds strongly to the view that rheumatism and chorea are closely related. When such pyrexial attacks are recognized, the child should be kept completely in bed during the febrile; this is often so slightly marked and so completely dissociated from disagreeable symptoms that it is sometimes difficult to persuade the patient to keep at rest. But even after the pyrexia subsides the child should still be kept at rest for a few days. In this way we may at least hope, by lessening the strain, to minimize the results of the injury done to their valves of the endocardium, and serious damage may be thus avoided, or at least lessened.

In the *Zeitschrift für Therapie* for April 1st, 1890, a number of formulæ are given for the external and internal employment of the remedy, of which we produce the following:—

R. Salicylate of mercury, gr. xv  
Powdered licorice-root, enough to make 60 pills. M.

Sig.—1 to 2 pills to be taken 3 times daily, after eating. (Schadek.)

R. Salicylic acid,  
Potassium carbonate, āā gr. ij  
Distilled water, ℥clx.

Sig.—For subcutaneous injection. (Plumert.)

R. Salicylate of mercury, gr. xv  
Liquid paraffin, ℥clx M.

Sig.—For intramuscular injection. (Jadassohn and Zeising.)

R. Salicylate of mercury, 1 part  
Vaseline, 36 parts.

Sig.—As a salve or ointment. (Plumert.)

R. Salicylate of mercury, gr. xv  
Magnesium carbonate, 5 v.

Sig.—As a powder for external employment. (Plumert.)

R. Salicylate of mercury, gr. ss  
Sodium carbonate, gr. xv to xlv  
Distilled water, 5 viij.

Sig.—For an injection in gonorrhœa. (Schadek.)

R. Salicylate of mercury,  
Potassium carbonate, āā gr. xv to xlv  
Distilled water, 5 Oij.

Sig.—For injection in gonorrhœa. (Plumert.)

A writer in *The Lancet* writes as follows in answer to the question, When is a Child Viable?

"In January of last year I attended a lady during her first pregnancy. She had had lead poisoning, was suffering from anasarca, and the urine contained a large quantity of albumin. About a fortnight before the completion of the seventh month she had a severe convulsion, and I induced premature labor and delivered her by forceps of a male child, weighing one week after birth 38½ oz., a month later he weighed 4 lb. 11 oz., at six months 8 lb. 1 oz., and when a year old he had just reached a stone in weight. For two or three weeks after birth he was kept wrapped in cotton-wool and surrounded by hot-water bottles. Feeding was by cows' milk and water."

Boroglycerin-cream, the useful applications of which are sufficiently apparent, may be made as follows (*Pharm. Central*, in *Pharm. Record*, June 24): i.e. boric acid is dissolved with the aid of heat in 21.0 glycerin and allowed to cool 5.0 anhydrous lanolin and 70.0 paraffin ointment are melted together, colored by addition of 0.01 alkannin, the boroglycerin added, stirred to creamy consistence and perfumed with one drop each of oils of rose and bergamot.

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EDITORS:

A. LAPHORN SMITH, B.A., M.D., M.R.C.S., Eng., F.O.S., London  
F. WAYLAND CAMPBELL, M.A., M.D., L.R.C.P., London.

ASSISTANT EDITOR:

ROLLO CAMPBELL, C.M., M.D.

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MONTREAL, OCTOBER, 1890.

## THE IMPORTANCE OF ATTENDING MEETINGS OF MEDICAL SOCIETIES.

The season has once more come around when the different local medical societies have begun their work—work which is generally of great importance, for it is here that the harvest of medical research and experience is gathered in, thoroughly threshed out and the wheat separated from the chaff. This wheat is then fit for stowing away, to be brought out as occasion requires, at the larger and more important meetings of the profession in the Province or Dominion. We say that it is threshed out because for the elucidation of the facts of a case there is nothing so good as a fair and square discussion of those facts before a healthy medical society, composed as it generally is of men accustomed to looking at these facts each in his own way. We can recall many instances where a case has been brought up at a meeting of the medical society, which, after being thoroughly discussed has presented a very different appearance to the reporter of it, than when he entered the meeting, and

thus incalculable advantage is afforded, both to the practitioner reporting the case, to the members present, and last but not least to the patient himself or herself.

Another benefit of the meeting of the medical society is the bringing together of men who are most likely to be rivals in that particular field. If these men never meet each other, as they seldom do in the ordinary pursuits of practice, they will gradually come to have a distorted opinion of each other, which generally becomes corrected by a more intimate acquaintance. Indeed, the more often the medical men of a particular locality meet together, the better the feeling that will exist among them. It has often been remarked that the state of professional good feeling and courtesy is nowhere better than in Montreal; and it is admitted by most that a great deal of this is due to the beneficial influence of the two principal medical societies, English and French. The only thing to be regretted is that they are not more largely attended, and that instead of only 30 to 50 of a membership of 100 or 150, there are not 75 or 80 present.

### BISHOP'S COLLEGE.

The many friends and former graduates of Bishop's College will be pleased to learn that the present is the most successful session in point of numbers that the College has had since its inception.

The experiment of admitting ladies to this College on equal footing with the men has only been tried a short time, it is true, but so far it has proved eminently successful. The lady students, themselves, are more than pleased with the manner in which they are treated by their fellow male students. Some anxiety was felt as to how they would fare among a crowd of young men at the hospital, but in this regard, we are also glad to be informed that the conduct of the young men towards them, is most gratifying. A good many young women in this city, are, we understand,

closely watching the course of the experiment, and a number of them have signified their intention of joining Bishop's College next year, if the experiment this year continues to prove successful. As we predicted some time ago, this is the easiest, cheapest and quickest solution of the problem as to where women doctors are to get their education.

### BOOK NOTICES.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS, consisting of Original Treatises and Reproductions, in English, of Books and Monographs selected from the latest literature of Foreign Countries, with all illustrations, etc. Contents: *Insomnia and its Therapeutics*, by A. W. Macfarlane, M.D. Index to Vol. vii. Published monthly. Price, \$10.00 a year. Single copies, \$1.00. September, 1890. New York: William Wood & Company 56 and 58 Lafayette Place.

THE SCIENCE AND ART OF OBSTETRICS. By Theophilus Parvin, M. D., L. L. D., Professor of Obstetrics and Diseases of Women and Children in Jefferson College, Philadelphia, and one of the obstetricians to the Philadelphia Hospital. Second edition revised and enlarged. Illustrated with two hundred and thirty nine wood cuts and a colored plate. Philadelphia, Lea Brothers & Co., 1890.

The author states in his preface that such additions and alterations have been made in this edition, as will cause the work to represent the subject in its present state of advancement. Also that they have been made with sufficient thoroughness to entitle the volume to be regarded as a new book. After a careful perusal of this work there can be only one verdict, and that is that this work is unsurpassed by any other work on this subject in the English language. We have often been asked which did we think was the best text book to be had on Obstetrics, to which we have hitherto always replied without hesitation Playfair's; but since we have seen this classical work of Parvin's, we almost think the latter should take the first place. To borrow a well known expression it is the same as Playfair's, only more so. The great charm of both these authors is their ability to write just what the reader wants to know and no more. All that they say is pure wheat; there is no necessity of sifting a lot of chaff to get at it. There are many other works on obstetrics, some much more voluminous, others much smaller; but the former are diffuse and verbose while the latter are incomplete. This work is bristling with quota-

tions, but instead of introducing long extracts from the works of reference, the author only draws upon these latter for his bare facts and figures. In the same manner while every important article that has appeared in obstetrical journals is referred to, the whole gist of the article is given in only two or three lines. In addition to the innumerable references the author also gives us the benefit of his own vast and ripe experience. In the paper, type, binding and the generosity with which it is illustrated the publishers have fully done their share, which, however, is only what we expect from the long established reputation of the house of Lea Brothers. We might add that owing to the above mentioned peculiarities of the work, it is equally adapted to the student, practitioner and professor of obstetrics. It may be ordered through any bookseller.

### PERSONAL.

The many friends of Dr. E. T. Trenholme will regret to learn that owing to failing health he has been obliged to relinquish practice in Montreal, in order to seek a more congenial climate in Colorado or California. He was the first, and for many years the only, gynecologist in Montreal, and being possessed of great ability and courage, has enjoyed a widespread reputation as an operator. He was for several years Professor of Gynecology in Bishop's College, and is surgeon to the Women's Hospital. We wish him success in his new home.

A banquet was given on the 16th inst. to Dr. D'Orsonnens, on the occasion of the completion of his fiftieth year of medical practice, which was largely attended by both the English and French members of the profession. Next to the guest of the evening were the Deans of the four medical schools, each of whom made excellent speeches, that of the Dean of Bishop's College being received with especially marked approbation.

### NEWS ITEMS.

The subject of uterine disease reminds me that during the past six months I have had my attention drawn to a remedy which goes under the name of Dioiviburnia, the formula of which is given by the proprietors, it being composed of equal parts of the fluid extracts of viburnum prunifolium, viburnum opulus, dioscorea villosa, aletris fruticosa, helonias dioica, mitchella repens, caulophyllum thalictroides, sautellaria lateriflora, (each fluid ounce contains  $\frac{3}{4}$  dram each of the

fluid extract). The proper dose is, for adults, from a dessert to a tablespoonful three times daily after meals. In urgent cases with much pain it should be given every hour or two in a half glass of hot water. I am free to say that with the exception of the "black law" (a most valuable remedy) I was not familiar with the component parts of the Dioiviburnia, but having read the emphatic endorsement by Drs. J. B. Johnson, and L. Ch. Boiliniere, of St. Louis, two of the most eminent professors and practitioners of the city, as well as that of Dr. H. Tuholske, I was induced to give the compound a fair and thorough trial, and I am convinced that in Dioiviburnia we have a valuable addition to our armamentarium in our battle against the enemies of the noblest work of God—Woman.  
—*Medical Mirror*.

A \$200,000 LIBEL SUIT.—Suit has been entered by William Radam, manufacturer of Radam's Microbe Killer, against the *Druggists Circular*, of New York, for \$200,000 damages, the largest amount, so far as heard from that was ever asked for in a libel suit of this kind.

The pleadings show that the action is brought to recover damages claimed to have been done the business of the plaintiff by an article published in the *Druggists Circular* for September, 1889. This article gave the result an analysis of the Microbe Killer made by Dr. R. G. Eccles, a prominent chemist of Brooklyn, who stated that an identical preparation could be made by the following formula:

Oil of vitriol (impure).....	4 drams.
Muriatic acid (impure) .....	1 dram.
Red wine, about.....	1 ounce.
Well or spring water.....	1 gallon.

This mixture, it was alleged, could be made at a cost of less than five cents per gallon for which Radam charged three dollars.

It was further alleged that while when properly used sulphuric acid, the principal constituent of the Microbe Killer, was a valuable medicine, it was, when taken without due caution or advice, a slow but certain emulative poison; and the theories advanced by Radam, as to the causes of diseases and the proper method of treatment, were alleged to be totally erroneous. Col. Robert G. Ingersoll, the famous lecturer, is the counsel for the plaintiff.

The *Druggists Circular*, which is published at 72 William street, New York, expresses a desire to hear of any case in which unfavorable results have followed the administration of the Microbe Killer or of any other fact that would be interesting under the circumstances. They claim to have published this analysis without malice and with the sole intention of protecting the public from the loss of their health and money by the use of a dangerous nostrum.



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## Original Communications.

### A CASE OF TYPHOID FEVER OCCURRING IN AN INFANT 8 MONTHS OLD.\*

By Frank R. England, M. D. C. M., Professor of Diseases of Children in Bishop's College, Montreal.

Mr. President and Gentlemen. The case which I have ventured to bring before you to night is one of typhoid fever occurring in an infant 8 months old, and before reading a report of the case, I shall not attempt to make any other apology than acknowledge that there is nothing remarkable or peculiar about the case in any way. I have reported it simply because typhoid in very young children is an extremely rare disease, at least is a disease rarely recognized in infants.

A. L., an artificially fed babe, aged eight months, small thin and delicate looking, with a rather large and irregular shaped head (from lying a greater part of the time on the right side) covered well with long auburn hair. Family history good. In the month of June, which was the commencement of our infantile trouble in the city, he had some difficulty in digesting his food and had one or two attacks of vomiting and diarrhoea also an attack of bronchitis. The parents acting on my advice went away to the country for the hot months where they remained until Sept. 18. While they were in the country the mother said he got on well and gained in size and weight.

\* Read before the Medical Chirurgical Society of Montreal, 7th Nov. 1890.

*Present attack.*—They had not been home more than ten days when his stomach and bowels again became deranged. There was some vomiting and a little diarrhoea. He was worrisome, restless and feverish. I was sent for on the morning of Oct. 2nd, the third day of illness. The pulse then was rapid 140 per minute, tem.  $102\frac{1}{2}^{\circ}$  F.; respirations not much accelerated. Examination of chest showed the heart and lungs to be normal. The abdomen was much distended and tympanitic. Remembering the old digestion trouble in the early part of the season and being suspicious as to the quality and freshness of the milk supply, I put down the disturbance as being probably due to an entero-colitis, and treated the case accordingly beginning with a small dose of castor oil. and carefully regulated the feeding. After watching the case for a week and doing all I could to relieve the symptoms I found my patient no better, the temperature still remaining high from  $102\frac{1}{2}^{\circ}$  F. in the morning to from  $103^{\circ}$  to  $104^{\circ}$  F. in the evening the remission usually beginning after midnight. The pulse too was small and rapid, varying from 140 to 160 per minute and the heart's action feeble; the abdominal distention not at all lessened; with these rather grave symptoms to persist so long in so young a child I began to look upon the case as being somewhat serious and was at a loss to explain to my satisfaction the real cause of all the trouble. About this time on examining the abdomen I found the spleen enlarged, so much so I was able by gentle pressure over the abdomen to

feel its firm smooth surface beneath my fingers extending fully two inches below the ribs, the liver also could be felt about an inch below the costal cartilages and in a day or two I was greatly surprised to discover an eruption over the abdomen, chest and back, consisting of numerous small, isolated bright rose spots about the size of a pin's head or a little larger which if seen in the adult would at once be recognized as the typical typhoid eruption. The appearance of these spots, the persistent high temperature, the tympanitis with gastrointestinal derangement evidenced by vomiting, pain and looseness of the bowels, though at no time was there much diarrhoea, together with a decided enlargement of the spleen and liver compelled me to look upon the case as one of typhoid fever, though I had never before met with a case or remember of seeing one reported in so young a child. The temperature during the second week of fever remained high ranging from  $102^{\circ}$  to  $103\frac{1}{2}^{\circ}$  F. The tongue and buccal surface was red and dry, the gums swollen and hot. Slight bronchitis developed, causing a dry irritating cough. Headache seemed to be present for the hands were constantly kept to the head or the ears pulled. The eyes also were sensitive to light and were kept closed if the cradle happened to be turned towards the window. At the beginning of the third week the temperature at the evening exacerbation continued about the same but at the morning remission it was from  $1^{\circ}$  to  $2^{\circ}$  lower than it was during the second week; by the end of the third week the temperature had become intermittent in character, each exacerbation falling lower until the normal was reached on Oct. 17th, about twenty days after the onset of the fever. The tympanitis remained throughout but disappeared immediately on the temperature falling to normal. The nourishment relied upon was diluted cow's milk, rice water and raw meat juice or Bovinine as a substitute for it. The medical treatment was wholly symptomatic, twelve drops of brandy every two hours was given throughout, with, I believe much benefit in sustaining the heart's action. A full dose of quinine was given in the afternoon if the temperature was up to 103 and the same dose repeated in the evening if the fever remained high; tepid sponging of the body and

cold to the head was systematically carried out. Small linseed tea enemata with a little turpentine added were given occasionally and thought to relieve the distention by causing flatus to be passed per rectum. Notwithstanding the long and rather severe course of fever no complications or sequelae followed, and the infant made a good and uninterrupted recovery.

In support of my diagnosis I may add that the father of my patient is principal of one of our boarding schools and during my attendance three of the pupils were taken ill and obliged to leave the school with symptoms of typhoid fever.

### WHY APOSTOLI'S METHOD SOMETIMES FAILS TO ARREST HEMORRHAGE.

By A. LAPHORN SMITH, B. A., M. D., M. R. C. S., England.  
Lecturer on Gynecology in Bishop's College, Montreal.

As Apostoli's method has now been applied about 40,000 times with varying success on over 2000 reported cases, 600 of these having been under the care of Apostoli himself and the remainder under some of the ablest men of nearly every country in the world, it is about time to inquire why the success has been varying or indeed why the method has ever failed at all to do what Apostoli has claimed that it would. One of the most decided claims which has been made for it was that it would arrest hemorrhage in every case; and as I firmly believe it will do this, in every case in which Apostoli's method is properly carried out, I think it may be of interest to demonstrate, if possible the causes of failure.

But first of all let us clearly understand what we mean by the term "Apostoli's method." By this we mean the scientific and systematic use of the positive pole of the galvanic current in graduated doses of sufficient strength and applied during a period of time long enough to cauterize the whole of the endometrium, or as Apostoli calls it "*galvano-caustic positive*." As I believe that failures have been due in every case to the lack of carrying out some or all

of these conditions, I had better review them one by one.

I. It must be scientifically applied. That is to say there must be no guesswork about it, no depending on the patient's impressions or the number of cells in the circuit. Some patients will make a great outcry, as if they were suffering, while no current at all is passing in the circuit, while other women will quietly endure a current of 150 milliamperes without a murmur. Then a battery which at one time will give out a current of 17 milliamperes per cell will at another time only give a current of two or three, so that applying 10 cells may mean all the way from 20 to 170 milliamperes. Therefore, unless a reliable and accurate instrument is employed to measure the current with, it cannot be said that it is applied scientifically. The strength of current necessary to cauterize varies in direct proportion to the amount of surface over which it is spread out. Martin, of Chicago, has ascertained by experiment that a current of 25 milliamperes traversing a positive platinum electrode of one square centimetre of surface, pressed firmly against the mucous membrane of an hypertrophied cervix, the circuit being completed by a large abdominal electrode, will produce a dry condensed condition of the tissue beneath the surface of the plate on the membrane in five minutes.

A catheter measuring one-third of a centimetre in diameter is consequently about a whole centimetre in circumference, and for every centimetre in length of such a sound at least 25 milliamperes of current are necessary for cauterization.

What are we to do in cases where for various reasons the patient can only bear 50 or 75 milliamperes? We must simply take the precaution to expose not more than two or three centimeters in length of such a sound. If the uterine cavity is longer than that, then it must be treated in successive sections on the same or on different days. By using carbon electrodes of de-

finite surface, we can regulate the strength of current necessary for cauterization, or by using flexible bougies covered with platinum, gold or aluminium wire over a certain extent, of which more will be said later, the same object may be still better attained. As the higher the current which may be borne, the larger the extent of intra uterine mucous membrane which can be dried up at a single sitting, it is very important to leave nothing undone that will render strong currents more bearable; this requires attention to three details:

1st. To have the cutaneous electrode as large and moist as possible. Thus a clay or bladder electrode measuring 6 by 9 inches will enable the patient to bear on the skin twice as much current strength as one measuring only 3 by 9, and a 9 by 9 will enable her to bear three times as much as a 3 by 9, and so on.

2nd. As the pain at the intra uterine electrode must be concentrated to a definite strength, namely 25 milliamperes per square centimetre of surface, in order to be effective, it is obvious that we cannot diminish the intensity and consequent pain without at the same time lessening the efficiency. In other words, pain at the cutaneous electrode is avoidable no matter how large the dose, while it will be present at the active or internal electrode whenever the intensity passes a certain point. This point varies, however, very much in different women in direct proportion to the degree of development of the nervous system. Some women will endure without complaining 150 milliamperes while others more highly nervous will hardly endure 25. In these latter women the best thing to do is to give them a small sprinkler bottle of the A. C. E. mixture in one hand, and tell them to smell it from their handkerchief doubled up in the other hand. You begin at zero and increase the dose gradually until she has become slightly under the influence of the anæsthetic but not unconscious, when she will easily bear the desired strength of cur-

rent. As long as she is able to feel very much she is able to help herself to the mixture, but when her sensibility has been sufficiently dulled she will cease to put any more on her handkerchief. I feel perfectly safe in doing this even without an assistant. As soon as the maximum has been reached the anæsthetic may be removed. I have made a great many applications in this way, and have never had the slightest accident. The only inconvenience is that the patient may want to sleep on my chair for five or ten minutes afterwards. In employing this treatment on highly educated and nervous women I feel satisfied that a little anæsthesia enables us to employ much more effective doses without any pain whatever.

3rd. Fortunately women become accustomed to the passage of the current. Besides, their sense of modesty and their sense of fear must be overcome, especially as this latter is often mistaken for pain, so that it is very important to begin this treatment with great gentleness, not exposing the patient needlessly, and proceeding very slowly until she becomes accustomed to it. I generally expect to devote two or three sittings to overcoming their fears.

II. The treatment must be carried out systematically, that is at regular intervals until the bleeding has been stopped. Some patients will come once, and then not return for a couple of weeks. One of the usual excuses is that they did not like to come while they were unwell; but as some of them are unwell for 25 days out of 30 it is necessary to explain to them that the treatment must not be delayed for that. I generally allow them to loose for two or three days, but if the flow is very severe I stop it at once. In fact in a case of bleeding fibroid I go on with the treatment three times a week quite irrespective of menstruation until towards the end of the treatment, when I allow the patient to have a period without interference, in order to test my work. If we could give enough current at the first application to completely

destroy the whole of the endometrium, and if that spongy diseased lining membrane did not return again, then one application would invariably cure the patient. But such, unfortunately, is not the case. It requires several preliminary applications in order to test the patient's endurance or tolerance. Then it takes two or three more to reach a point where it becomes effective. Then we may not be able to turn on enough current to cauterize more than a quarter of the entire surface if we do it in sections, or to cauterize through more than a quarter of the thickness of the vascular membrane if we try to do all the surface at once.

Then we know the tumor came there by reason of bad circulation (at least such is my belief), and even if we do destroy the bleeding endometrium we cannot prevent it from being reproduced one or more times or as long as the circulation remains bad. That such is the case is proved by the return of the bleeding after the whole of the diseased surface has been removed by the curette. But we can also be sure that after each destruction of engorged tissue a healthier skin will be produced. This is proved by the result in every one of the cases which have passed through my hands during the last two years, in not one of whom has the hemorrhage from mucous membrane ever returned. Moreover, I could see, as it were, the mucous membrane, becoming healthier by the gradual lessening of the flow at each period. Thus a mucous membrane which was so diseased before treatment as to allow the blood to escape during 14 days out of 30, would after ten treatments only bleed seven days out of 30, and after 20 treatments only bleed four days, and after 30 treatments only bleed three days. In most of the bleeders who have come under my care, the mucous membrane was in such a friable condition that merely passing the sound with the utmost gentleness would cause a red stream to pour forth. I will illustrate this by a case:

Mrs. P., aged 33, came under my care on

dose repeated in the evening if the fever remained high; tepid sponging of the body and case to the lack of carrying out some or all

the 6th of August, 1889. Dr. H. O. Marey, of Boston, happened to be spending a few hours with me on that day, and I invited him to examine the patient for me. It was impossible to pass a uterine sound, but on introducing a flexible bougie, which he did with the utmost gentleness, the blood flowed out and ran on the floor of the office before I could catch it. She gave the following history: Five years before, she began to suffer from painful and excessive menstruation. In spite of all her physician could do for her she was never longer than one or two days a month free from hemorrhage. After several months' treatment she consulted a specialist, who was unable even by packing her in ice to arrest the flow. In March, 1887, she consulted two other gynecologists, who decided that nothing short of total extirpation would afford her any chance of life. She declined the operation and plugging of the vagina was resorted to for the next two years, frequently necessitating the calling in of a physician in the middle of the night. By this time she was so weak that she could not walk up or down stairs without assistance, but after four months' treatment with galvanization, extending from August to November, she was able to do all her own housework, including washing and scrubbing, while her periods returned regularly every four weeks and lasted less than four days. At no time during the five years previously did she ever go longer than two weeks without a period, and for the last six months before commencing the electrical treatment was she ever more than two days per month free from hemorrhage.

One of the commonest causes of failure, I believe, will be found in the neglect to apply this coagulating surface of the positive pole to the whole of the bleeding surface, and, to tell the truth, with Apostoli's solid platinum sound this is in some cases not only difficult but sometimes impossible.

The uterine canal in some cases is so deformed in direction by the projection of the

tumors into it that a sound must describe many curves before it can reach the fundus. Over and over again I have failed to introduce a uterine sound, or even a small probe, farther than two and a-half inches, and yet the canal was found to extend to over five inches by passing a flexible bougie, so that such cases when treated by Apostoli's method with the solid platinum sound are bound to be failures, simply because the bleeding surface of the cavity of the uterus is never reached at all. I can illustrate this point by some of my most successful cases in which the attending physicians as well as myself had tried many times to introduce a solid sound and failed, and yet I have been able to introduce a flexible bougie, and then after perhaps a dozen applications have been able to get the solid electrode in, the full distance.—*Canadian Practitioner*.

#### INTRA-UTERINE TREATMENT OF FIBROIDS.

Dr. Geo. Gautier made a communication before the Academy of Medicine, Paris, on the 8th of April, 1890, in which he said the electrical therapeutics of fibroids was, from the first attempts by Brachet, A. Martin, Onimus, Cheron, extra-uterine or vaginal, and made use of interruptions or reversals of the continuous current. This same method of treatment is being revived under a new name, by Championniere, Dannion, etc., who claim that it is the best.

Since the year 1882, Dr. Gautier has applied Apostoli's method, which consists in the intra-uterine monopolar galvanocauterization of the uterus. He had made 1329 applications on 67 patients with uterine fibroids, 18 of whom were sent to him by other doctors who verified the results obtained; 63 of the 67 have been seen since, and have remained cured, while four failed and one died from some undiagnosed condition of the appendages.

The first effects of the treatment were

manifest in a reduction of pain and hemorrhage.

In bleeding fibroids, the kind of current is of importance, the positive pole being the hemostatic and relieving congestion. There are neither low, medium nor high intensities. The method requires the highest possible dose, according to the case, always taking care to stop on the appearance of pain. The stronger the current the shorter the time necessary to cure the fibroids; although weak currents relieve pain, they are generally ineffectual for arresting hemorrhage. He used intensities varying from 30 to 250 milliamperes, averaging 120 to 140 in most cases.

This method is neither powerless nor dangerous: and in the face of the death rate of 42.85 per cent. in hysterectomy, and of 13.3 per cent. in removal of the appendages, according to Championniere, it is the treatment *par excellence* for all fibroid tumors of the uterus. The 106 observations of Keith, 79 of Slavienski, 200 cases of Sneguireff, added to the 600 cases of Apostoli and 67 of my own, and those which have been treated in Europe and in America, make a total of more than 2,000 cases which plead in favor of the value and harmlessness of intra-uterine treatment; and what are, moreover, strong and irrefutable proofs of its value are the facts that eminent surgeons are laying aside their knives in the presence of Apostoli's method, considering it as the most efficient medical treatment of fibroids of the uterus.

## PROGRESS

ON

## DERMATOLOGY AND SYPHILIDOLOGY

BY JAMES M. JACK, M.D.,

Lecturer on Skin Diseases, Bishop's College. Dermatologist to the Montreal Dispensary,

MONTREAL.

*ERYSIPELAS—New Method of Treatment.*

—Rosenbach's Method—Wash affected and surrounding portions of skin with soap, then apply 5 per cent. solution of phenic acid in absolute alcohol.

Nolte's Method—Mucilage of acacia con-

taining 3 per cent. to 5 per cent. solution of phenic acid and applied to affected and surrounding parts twice daily.

Dr. Ebstein dissolves the phenic acid in vaseline.

Koch's Method.—With a soft camel's hair pencil apply a thin layer of the following ointment: Creoline, 1 part; idoform, 4 parts; lanoline, 10 parts. Mix. Cover with rubber tissue.

Nussbaum and Brunn's Method.—Ichthyol with or without collodion.

Hallopean's Method.—Solution of sodium salicylate (5 per cent.) applied on compresses covered with tissue to prevent evaporation.

Hueter's Method.—Carbolic injections in surrounding healthy skin, 1 to 2 centimetres ( $\frac{1}{2}$  to  $\frac{3}{4}$  inches) from edge of affected portion with following solution: Acid phenic pure, alcohol absol., of each 3 parts; distilled water, 94 parts. Mix. (Very painful; only applicable in grave facial erysipelas and erysipelas of the hairy scalp.)

Kraske's Method.—Scarification of the borders of the affected portion before applying antiseptic substances.

Dr. Lauenstein uses incisions in the healthy skin, and uses cloths wet with solution of phenic acid or sublimate.

Wolfer's Method.—Mechanical compression with strips of adhesive plaster applied at borders of the affected skin, on the healthy surface, completely circumscribing it.

Dr. Koll suggests the employment of rubber tubes or bands, to take the place of the adhesive plaster.

Dr. George C. Kingsbury uses ergotin applied with a camel's hair brush to and around the affected area, and he has found it a painless, rapid and almost certain cure; in fact, he cannot recall a single case in which it has failed. It is best used in the form of a fifty per cent. solution in distilled water, painted on frequently. Generally one or two applications suffice to diminish all feelings of tension, and it is rare that the pain is not quite conquered in twenty-four hours, leaving the patient compara-

tively well. In many cases he has relied solely on the ergotin, not prescribing any internal medicine. Dr. Kingsbury does not attempt to explain the action of the ergotin, but the effective way in which it cuts off the excessive blood supply to an over vascular area naturally suggests its trial in other passive congestions, and in these he has also found it to be very useful. Dr. Neskrovsky (Novosti Peradu., Nov., 1888), describes two cases in which he used a mixture of "extractum secalis cornuti" and glycerin with success, the temperature becoming normal in six or seven days. This encourages Dr. Kingsbury to ask for further trials of ergotin, which he has found in no fewer than thirty cases to practically cure in one day.—*British Med. J.*, 15, 3, '90.

\* \*

**HYDROXYLAMINE.**—The suggestion of Professor Binz to introduce hydroxylamine as a substitute for pyrogallie and chrysophanic acids has been practically taken up by Dr. Eichhoff, who reports enthusiastically on this new drug. He used the following formula:—

℞ Hydroxylam hydrochlor, gr ii  
Spirit vini  
Glycerin, ā ā ʒ ii  
Sig. For external use.

The affected parts of the skin after being first washed with soft soap, are painted with this solution four to five times a day. The alcoholic solution has the advantage of penetrating the skin much more rapidly than if ointments were used as a vehicle. Application of stronger solutions than one per cent. require caution. Hydroxylamine has been used by Dr. Eichhoff for ringworm, and for the disease in close relation to ringworm, called sycosis parasitaria, and also in cases of lupus vulgaris. Especially with the latter his success was remarkable. He also recommends the drug for treating psoriasis and parasitic eczema.

\* \*

**ACNE ROSACEA.**—Unna (Lyon Medical, June 1st, 1890), recommends the internal

use of three-quarters of a grain of ichthyol, and at the same time prescribes lotions of the same substance dissolved in water. At night he recommends the application of an ointment composed of zinc ointment twenty parts; rice powder, five parts; sulphur, two parts. Where vascular dilatation is a prominent element of the affection, Unna advises puncture of the venous trunks with Hebra's instrument, the procedure to be repeated two or three times a week. In light cases, and as a supplementary treatment in severe cases, he advises the use of ichthyol soap, while warm water should invariably be used for washing.

\* \*

Ointment treatment for Epithelioma and other growths of like natures a good paste to use is as follows (Dr. Bougard, of Brussels, was the first to bring it before the profession):—

℞ Wheat flour,	60 parts.
Starch,	60 "
Arsenic,	1 "
Cinnabar,	5 "
Ammonium chloride,	5 "
Mercuric chloride,	0.5 "
Saturated sol. of zinc chlor,	245 "

The first six ingredients are separately ground to a fine powder and mixed in a mortar. The zinc chloride solution is then slowly added, while the contents are rapidly stirred. The soft mass is then poured into an earthen pot, and, if covered, will keep for months. In the treatment you first remove the horny covering, as you have in epithelioma with liquor potassæ; the paste is then applied and allowed to remain for thirty hours, after which poultices are applied for three days. At the end of this time a slough will come away, leaving a healthy granulating surface.

\* \*

**BALSAM OF PERU IN LUPUS.**—Dr. W. Beck presented a patient before the Nurnburg Medical Society who had Lupus over a great part of the lower extremities. The patient had been to Vienna in 1887, where

he attended hospital for several years, during which time he was vesicated, cauterized and scraped with a dermic gouge, but with little benefit. In November, 1889, the patient came to him, whereupon he removed all the new growth with a dermic shovel and Paquelin and dressed the fresh wound with Peru balsam, which he applied on boracic lint with antiseptic bandages. It was dressed every second day; later every fourth day. He had left the hospital perfectly cured. Tubercular bacilli could not be found in any of the new growth removed from the wounds, nor could they be found in the sputa.

#### TREATMENT OF CARBUNCLE.

Dr. J. L. Napier, of Blenheim, S.C., uses pure carbolic acid locally in the treatment of carbuncles. He paints the whole carbuncular mass with pure carbolic acid three times a day, until the mass begins to lessen and the slough is detached. If the carbuncle is seen before suppuration has begun, in three or four days it will abort. If suppuration has started, in seven to ten days the whole carbuncular mass can be removed with the forceps, leaving a healthy, granulating ulcer.

The treatment, as above detailed, reduces the time of treatment from weeks to days; and besides that, the acid being a local anæsthetic, adds very much to the comfort of the patient by relieving the pain,—so much so that, after the first application, very little anodyne is needed.—*North Carolina Medical Journal*, August 1890, p. 540.

#### DRY SEBORRHOEA OF THE SCALP.

Dr. L. A. Duhring, of Philadelphia, states that in mild cases, such as are usually met with, the diagnosis is easy; but in severe cases the affection may resemble squamous eczema or psoriasis. The treatment is generally followed by satisfactory results. An ointment of precipitated sulphur (1 part to 8 or 1 part to 4), which is the simplest and at the same time one of the most efficacious remedies, will be prescribed. Resorcin, as an ointment or as a lotion, is also useful, and may be ordered in the strength of 1 part to 48, or 1 part to 24. Lotions are often more convenient to apply than pomades, and a formula like this may be employed:—

R.—Resorcini, 1.00 gramme (gr. xv).

Glycerini, 0.64 gramme (℥ x).

Alcoholis, 1.00 gramme (℥ xv).

Aquæ, 30.00 grammes (℥j).—M.

—*The Medical News*, August 30, 1890, p. 202.

## Society Proceedings

### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

*Regular Fortnightly Meeting, October 3rd, 1890.*

DR. ARMSTRONG, PRESIDENT, IN THE CHAIR.

Present:—Doctors Laphorn Smith, R. L. McDonnell, Birkett, Bell, Shepherd, J. A. McDonald, Roddick, Peirigo, Spendlove, Mills, Wyatt Johnson, Kinloch, F. W. Campbell, Smith, Hutchison, Allan, R. Campbell, F. R. England, T. D. Reed, Ruttan, J. M. Jack, W. Gardner, J. J. Gardner, Alex. Gardner, Brown, Leslie Foley, Alloway, Sterling, Stewart, A. D. Blackader, Buller, Edward Blackader, J. C. Cameron, Gurd, J. Evans, McGannon, Vidal, La Fleur, McCarthy, Proudfoot.

Dr. R. McDonnell exhibited a case, the history of which he read, of Hodgkin's disease, in which the nervous symptoms were very marked, there being unilateral sweating, cough and fainting attacks, as well as dilatation of the pupil. Dr. Mills wanted to know whether the dilatation or the cardiac troubles were subsequent to the glandular disease, or had preceded it. Dr. McDonnell was unable to answer. Dr. Mills referred to the experimental production of unilateral sweat and dilatation of the pupil by cutting the vagus and stimulating the peripheral end, also in the l-g by cutting the sciatic. The question which he asked himself, was, was this glandular disease the result of some disorder of the nervous system, which we know is sometimes capable of affecting nutrition, for instance, when profound anæmia is caused by grief; he thought that it was. With regard to the pulse which was always 100 or more, Dr. Mills thought that this was due to the pressure of the enlarged glands on the middle cervical ganglia. Dr. Birkett reported that he had examined this case and thought at first it was a case of laryngeal phthisis, as the vocal chords were ulcerated. He had treated this with lactic acid, under which it healed. The lungs were subsequently thoroughly examined, when no evidence of phthisis could be found. This was worthy of notice, because many cures of laryngeal phthisis with lactic acid had been reported, probably incorrectly. Dr. Shepherd stated that he had removed a chain of glands from this patient, extending so far down that he could feel the arch of the aorta when he did not venture to go any further, preferring to leave a part of the last gland undisturbed. The appearance of this patient's neck led him to think that these glands were strumous; as in Hodgkin's disease the shape was different. Dr. Roddick was opposed to the removal of diseased glands in Hodgkin's disease, and he referred to



the case of a well-known young gentleman in this city in whom every gland of the body was affected, and who rapidly grew worse after having been operated upon. He had been treated with arsenic without benefit.

Dr. Roddick showed a case of *fragilitas ossium*, with non-inflammatory softening of the bones of the legs. This child broke his right thigh when one and a half years old. At three years of age he broke his other thigh, and now at the age of thirteen he had twenty-seven fractures, limited, however, to the lower extremities. After each fracture great bowing of the bones had followed. The speaker intended to amputate one leg immediately, and another shortly after. Dr. Hutchison who attended this boy, said that the fractures were quite painless, and that he generally set them himself. Dr. Mills thought that the fractures being limited to the lower extremities, pointed to some disorder of the trophic nerves. Dr. Shepherd referred to a case in which the bones of the lower extremities have become greatly atrophied simply through want of use. Dr. Laphorn Smith thought that the disease was due to gross errors in infant feeding. During the 12 years he had been in practice in Montreal, he had only seen two or three cases of bow-leg and knock-knee, while during six months at the East London Children's Hospital, he had seen at least two or three hundred cases, about forty-five of which were operated on. The disease was exceedingly common in the east end of London, where it was the exception rather than the rule for children to be fed on milk.

Dr. Bell showed two children on whom he had operated for *genu valgum* and bow-legs. From the photograph taken before the operation, a great improvement was evident.

Dr. Gardner exhibited a myoma and a myosarcoma which he had removed from two patients nine days ago. Although in one of them the adhesions were very general and the operation was very serious, a piece having been taken out of the intestine, still both patients had made good recoveries so far. He had used Koeberle's *serre-noeud* in both cases. In one of them the stump was very large and began to bleed the day after the operation, as also on the second day after, but each time it was arrested by screwing up the clamp. In the other case, the tumor was cystic, owing to the presence of the lymph spaces. Dr. Alloway assisted at the operation and made some remarks on Howard Kelly's method of treating the pedicle. Dr. Laphorn Smith called attention to the immense advantage of the management of the pedicle with Koeberle's *serre-noeud* over any other method. If this case, in which there was secondary hemorrhage, had been treated by dropping the stump into the abdominal cavity, she would either have bled to death, or she would have had to be re-opened.

Dr. Shepherd showed a tumor which he had removed from the broad ligament of a young girl. Owing to the dense adhesions the patient was pulseless when the operation was concluded, having bled very profusely and the peritoneum having been peeled off the intestines in several places. She, however, rallied afterwards and made a good recovery. He was obliged to keep in the drainage tube for five days after, on account of the oozing. Dr. Johnson was not sure whether this tumor was a papilloma or whether it was not rather a sub-peritoneal fibroid which had been expelled from the uterine wall in the fold of the broad ligament.

Dr. Thos. Burgess, now superintendent of the Protestant Insane Asylum, was proposed for membership.

Dr. McGannon, of Brockville, reported a case of sudden death in a girl who he had supposed was suffering from typhoid fever. No post mortem was allowed, so that he was unable to say whether it was from hemorrhage or heart failure. Dr. Mills thought that it was probably due to heart failure, as fatty degeneration of the heart was a common condition in typhoid. Dr. R. McDonnell had had a similar case in which the patient had died in his presence in the same manner. Dr. Laphorn Smith thought that in view of the liability to death from heart failure in typhoid fever, it was of great importance to strengthen the heart with digitalis and alcohol early in the disease. He had never lost any case from heart failure, the only deaths being from perforation and hemorrhage.

#### ANNUAL MEETING FOR ELECTION OF OFFICERS, OCTOBER 10.

PRESIDENT, DR. ARMSTRONG, IN THE CHAIR.

Present:—Doctors Stewart, Mills, Laphorn Smith, England, Springle, Jas. Stewart, Williams, Allan, G. Brown, Alloway, James Guerin, McConnell, Jack, J. A. McDonnell, J. J. Gardner, Alex. Gardner, W. Gardner, Proudfoot, Foley, Burkett, Carson, Roddick, Telfer, Rodger, Finley, G. Ross, F. W. Campbell, Buller, J. C. Cameron, Stirling, Wyatt Johnston, Rutan, Henshall.

After reading the minutes of the last annual meeting, Dr. Burgess was ballotted for and elected. The treasurer's report was then read, audited, received and adopted. The secretary also reported the progress of the society, which was very satisfactory, there being a steady increase in the number of members and in the number in attendance. The society then proceeded to the election of officers for the ensuing year, which resulted as follows:—President, Dr. Shepherd; First Vice-President, Dr. Proudfoot; Second Vice-President, Dr. McDonnell; Secretary, Dr. McCarthy; Treasurer, Dr. J. A. MacDonald; Librarian, Dr. J. N. Jack; Council, Drs. Armstrong, Bell and Stewart.

## Progress of Science.

### POINTS FROM THE ADDRESS IN SURGERY BEFORE THE BRITISH MEDICAL ASSOCIATION.

By Lawson Tait, F. R. C. S.

*Medical Errors.*—That we have made mistakes, that we have had to confess that our favorite theories and some of our best established practices in one generation have become the flogging posts of the next, is but to confess that we are human. Nothing is human if it can have no progress, and progress is impossible in all human affairs without error. Even the most perfect of human sciences—mathematics—has had, is having, and probably will have in time to come, its evolutionary stages. Even the apparently finite doctrine accepted unquestioningly for nearly two thousand years, that two lines which are parallel can never meet in space, is being shaken to its foundation, and those who can approach space from the aspect of its fourth dimension are staggered to find that the shortest road between any two fixed points may not necessarily be in straight line. With such awful examples before us: with the fear that even the treasured first book of *Euclid's* propositions may prove to be a fraud, we who practice a mere handicraft, but one of the utmost importance to humanity, have need to walk carefully. It is not necessary that I speak for the importance and dignity of our work, for that is admitted on all hands, even with full knowledge of our shortcomings. Admitted it is to the full, for there is none unwise enough to avoid the counsel and help we can give him when the inevitable hour of trouble comes for his turn. The scoffer may be what he likes when he is well, but when the abscess pains or the tumor threatens, his tastes speedily become monastic. Humanity has on the whole a complete confidence in us, not that we are perfect, but as far as we are so approached we honestly do the best we can. It behooves us, however, from time to time to search out the innermost corners of our chambers, to rid them of all uncleanness, and then to garnish them and to set them in order, hiding no blemish, concealing from ourselves even no defect, but striving in all ways to the perfection of that noble work to which we have set our hands.

*Preliminary Education.*—A surgical craftsman must be a trained gentleman, accustomed by a classical education to use his native tongue with ease and fluency and without confusion. He must have the fundamental principles of reasoning and of business habits instilled into him by such mathematical training as will be involved in his being able to pass some of the ordinary

examinations now insisted upon by all the licensing bodies. If he can spare the time and money to become a graduate in arts so much the better. Up to this point we are all agreed. Our apprentice surgeon has now to enter upon his purely professional training, and to learn the constituent parts of the body and their functions; and here comes in our first difficulty. I, for one, desire to raise my voice in protest against the absurd attention to detail and the enormous waste of time involved in the present biological training of the surgeon student. Let him be grounded in every fact of anatomy which may, under the rarest and most unlikely conditions, aid him to appreciate the results of any injury, or a di-placement, or of a new growth; let him be grounded in all such items of information concerning the ultimate structure of organs and their mediate and immediate functions, and the changes to which disease subjects them.

Let him be placed so constantly alongside somatic sections that he will not only learn his anatomy, but that he will never forget it. Let him see things and think of them so often that he will, as it were, see through his patient. But I plead most earnestly that your successors shall be spared that senseless grind at useless details of anatomy with which our own young memories were burdened—details which he can remember only by a demoralising system of catch words—details which he prepares himself to forget the moment the necessity of examinations is over.

*Biology.*—Still more strenuously I appeal that our student be altogether relieved from that senseless system of biological training which has set in as a fashion at Cambridge, at Oxford, and at Edinburgh. Not many years ago I attended a lecture on physiology given to medical students, which consisted in an explanation of a brass instrument resembling a model of Clapham Junction, intended to explain something about muscular fibre. I could not understand it of course, I was too much of an old fogey, but I had this consolation that when talking over it with my young friends who had attended the lecture with me, they could make nothing of it either, and it worried them as much as it had worried me. But there was a difference between us—it was demoralising to them, for it discouraged them, and small wonder! And how angry they must feel when they come to deal with human patients and human disease, that all these nonsensical details are of no use to them—not even for the purpose of general training—when they find, in truth that the time occupied in mastering such subjects has been absolutely thrown away. For students who are disposed to appear for a science tripos, or who have such a line of life open for them or the tendency towards it, who are possible professors of anatomy or biology, this kind of work is of course admirable; but of our

medical students, nine hundred and ninety-nine out of every thousand will have to find their positions at the bedsides of their fellow countrymen in times of accident and sickness, and there such knowledge is useless.

*Anatomy.*—I remember that we had to learn that the direction of the anterior cornu of the fourth ventricle of the brain ran a course which was backwards, outwards, downwards, forwards, and inwards, and we were enabled in the most improper way to remember these important facts by the word "bodfi." Has "bodfi" ever served any of you at the bedside? Is there any conceivable condition of human accident or ailment in which "bodfi" could assist you to relieve your patient? The students who continue to learn such matters will find, as I have done, that they will be of no assistance to them to estimate the character of a delirium, and no amount of knowledge of the arrangements of the electrical current in muscular fibre will help them to determine the proper relations of a splint. What I wish for our students is that they should go back to the institutes of medicine and leave comparative biology to those who may be able to benefit by it.

Again let me remind you of the terrible task that we had to fulfil in committing to memory the names and relation, the ligatures and points of contact, of the bones of the wrist and of the ankle-joints. To me this task has never served in the faintest instance. If unfortunately I had ever to submit one of my limbs to a joint amputation, I should most unhesitatingly insist upon the selection of that devised by Mr. Syme. The other more fanciful methods of amputation I believe are constantly condemned for very many reasons. Still it may be that occasionally—perhaps ten times a year in the whole population of England—they are performed. For some specific reason they are not performed by surgeons in the country, distant from reference libraries and anatomical museums, and men who elect to perform such operations can in the course of twenty minutes, or half an hour master the relations of these bones sufficiently to enable them to carry out the particular object they have in view. The question which occurs to my mind with great force is, can the occasional performance of these somewhat eccentric proceedings justify the infliction of the senseless labour of committing all these special peculiarities of these bones upon every medical student who has to appear for examination? I cannot imagine that the committal to memory of these peculiarities can in itself constitute any kind of mental training, and I think the present system of anatomical education involves a gigantic waste of time and much frittering away of serious mental effort.

*Apprenticeship.*—What the boy wants after his general education has been fully developed, and his fundamental knowledge of useful

anatomical facts and physiological principles has been made perfect to the utmost of their extent for usefulness and not one scrap beyond that, is that he should be put at once into contact with his material. I therefore vote cordially with those who demand the restoration of the apprenticeship system in such fashion as modern requirements indicate. It is of course no longer to be a seven years' slavery in mixing pills and spreading plasters, for the modern manufacturing chemist does all that for us now, but it should be a period of at least two years spent in learning how to deal with patients, how to divine their peculiarities, and in learning how to avoid making an ass of himself in the sick room as the modern, newly-fledged, qualified assistant is certain to do for the first few years of his second pupilage, in spite of his biological lore.

*Manual Training.*—While the student is attending to this most important part of his training, he ought at the same time—and now I am speaking for those who have to follow the craft of surgery—to be taught how to use his hands. I should set him so many hours in the week into the shop of the village carpenter; and I should have him trained to use a saw, a chisel, a plane, and a skew, so that he should be able to make a long splint, if need be, as well as to put it on. And into the blacksmith's shop he should also go, till he knew how to strike properly with a hammer. Some of you may think this may be unnecessary; but if you could look with a workman's eye (as I can do, as I served my time at the lathe, the bench, and the forge) at a Fellow of the College of Surgeons—I won't give his name, but you will find him in almost every large hospital in the kingdom—who used a saw for the first time in his life in the amputation of a human leg, and see, as I can see, what a horrible mess he makes of his work, you will agree with me that a training in practical mechanics is just as necessary (I say it is far more necessary) for a man who has to operate upon his fellow human beings as is a training in anatomy.

The great difference between the man who starts his saw cutting from the point of the saw and the man who starts from the hilt is just as great, I think it must be much greater than the difference between the man who amputates a leg without any kind of knowledge of anatomy and the one who has such knowledge fairly perfect. During the two years that our student spends in this practical training for his after life, he would unconsciously imbibe the fundamental principles of the scientific training which he would afterwards have to undergo; he would see for himself day by day the characteristics of wounds healing healthily, and how different they are from those of a wound indicating action the result of constitutional poisoning. The meaning of these differences

he would learn afterwards at his clinical school. At present he can babble about the theoretical causes of the changes, but of the real facts and phrases of them he knows nothing. After his apprenticeship, as he heard in the academical rooms the explanation of the process of the healing of a bone, he could recall to his mind illustrations in the practice which he had already gone through, and the combination of the facts as he knew them, with their explanation, would impress the whole thing on his mind in a way to which at present it is a complete blank. As a matter of fact at present in medical education, the cart is being uniformly put before the horse. Impressions in youth are far better and more lastingly conveyed by the eye than by any other sense. Words referring to clinical symptoms and to physical diagnosis, which are now a mere shibboleth to the student, who under better arrangement possesses a living interest, and what is used merely as a dead rote for the purpose of passing examinations, would survive for his lifetime as the guiding principles of his practice.

*Anesthesia.*—Anesthesia has been to surgery what the motive power of steam has been for the arts, manufactures, and for commerce: it has revolutionised everything in connection with our art. And yet we are so accustomed now to take the advantage as a matter of course that we have almost forgotten its history. We are apt to ignore the fact that all our brilliant advancements of to-day could never have been arrived at but for chloroform—we could not have developed the splendid work of the modern ophthalmic surgeon, and the modern development of abdominal surgery would never have been dreamed of but for the genius and indomitable fighting qualities of James Young Simpson, who thrashed out the victory of anesthesia and gave us the anesthetic which for more than half a century has held its own against all comers.

In abdominal surgery nothing was really done, if we except the truly brilliant achievement of Ephraim McDowell, before the days of anesthetics. It is true that in this country a few parovarian cysts were removed and a still smaller number of very simple operations for ovarian tumors were completed; but there is little doubt that whenever any serious complication was met with, the abdomen was promptly closed. No solid tumor was completely and successfully removed till that now before us fell to the hands of my valued old friend, John Day of Walsall, who was gathered to the majority only a few months ago. The greatest advance of all—the intra-peritoneal treatment of the pedicle by means of the cautery in the hands of Baker Brown, giving a mortality of ten per cent,—was the real starting-point of all our progress, and that proceeding would have been an absolute impossibility without the aid of an anesthetic.

*Listerism.*—In the result of our work we have much cause for congratulation, but I would rather look on the other side of the fence and wonder if they could not be improved, even with the methods we have now at work. For the last twenty years we have first been opposing a great theory, then we have been accepting facts on which it was based, then we have been rushing into violent and illogical enthusiasm about it, only at the end of all to throw doubt and dispute on the whole field. I confess I always doubt surgical theories, just as I doubt all theories of art. The greatest painters have been the least trenchant about theories. Turner never had a theory of any kind, and always used bad pigments; and John Brown tells us that Guido mixed his colors with brains, and could get no further explanation of his results. No school of art which started on a theory has ever made a lasting impression. The modern school of the pre-Raphaelites gathered adherents, it is true, but they have nearly all deserted their theories on finding that the Dutch school knew far more than they did; the Flemings had all their excellencies without falling into their errors. The Impressionists were similarly a failure. Our surgical theories never lead to anything; not even the great antiseptic theory has led to any tangible result beyond what every housewife knew before its day, namely, that dead moist organic matter will decompose if some agent or other gets to it. We know now the exact nature of this agent, but this is a new fact, not a new theory. The theorists forget that living tissue will not decompose under the access of the same influences—influences, indeed, which surround us at every moment of life, and pass by harmlessly. Now the theorists take a lingering farewell of their lost darling by saying, "Well, at any rate, it taught us cleanliness." As a matter of fact, the very reverse of this is true, for it was the arguments of those who opposed the antiseptic theory which demonstrated the successful cleanliness. The last phase of this discussion—I sincerely hope the very last—is the antiseptic accoucheur, who pleasingly fancies that both his theory and his practice are new, whereas, in matter of fact, Semmelweis literally died for them nearly thirty years ago. No more instructive reading can be indulged in than a brief monograph which has recently been issued concerning the history of this truly great man—a man so great that I think he deserves to have erected to his memory a statue in every civilized country. Semmelweis had no theory, he simply stated the fact that puerperal women in Vienna were poisoned by dirt. "Wash your hands," he cried, "and the women will not die," and his colleagues ruined him for his frankness. But he persuaded the world he was right. Simpson took up the fight with his accustomed vigor, and carried it through, and now, forsooth, we hear of the antiseptic

theory, as applied to midwifery, as a new thing.

What is wanted for the improvement of our surgical results is not any more theories, but better work and better systems of training. An art like surgery cannot be acquired by passing examinations.

*Surgical Results.*—To Sir Spencer Wells is, most undoubtedly, due the credit of putting the publication of surgical results on a business-like basis, and the extension of this ought to be encouraged in every possible way. When the results in abdominal surgery, which began to be obtained about twelve years ago, were first published, they were so amazing that the favorite criticism of them was, that they must be lies—a complimentary method of criticism which, it may be mentioned, was meted out to Ephraim McDowell. This sort of thing at first was very irritating and used to make me very angry; but for many years past I have ceased to trouble about it and the incredible things of eight or ten years ago are now matters of every-day experience. My present desire is to urge in every possible direction a careful classification and publication of surgical results as one of the best methods of improving them, for it is clearly necessary, first of all, that we should know what our results really are before we can see the necessity for their improvement; and, secondly, it is only by the comparison of the results from different hospitals and different surgeons that it is likely that we shall start rivalry and inquiry as to the causes of the better results.

*Surgical Investigations.*—Another great advance required is the devising of logical plans in recording and classifying the results and also the adoption of reasonable methods of conducting the investigation. For example, no one would now, in making a research on the mortality of amputations, arrange his figures without a careful separation of amputations for accident and those for disease, and a perfect arrangement of the cases according to the limb affected and the point of amputation. But until Simpson pointed out the necessity for such divisions, the importance of them was not clearly understood, certainly was not fully admitted. Arising out of a matter so simple as this, there are scores of points which require settlement, yet no serious attempt has been made even to indicate what such points may be. It may be, for instance, that one particular method of flap making will suit primary amputations better than another, and a point so important could be settled in twelve months by a simple agreement amongst a group of hospitals and their surgeons. Let one set of men work steadily at one method for one class of cases, and another set at another method, and the statistical laws will be found faithful to the truth, as they ever are when the figures are large enough. Instead of adopting a method

like this, our present method is that when such a point is raised for discussion, surgeon after surgeon rises and gives vent to vague impressions which he is pleased to elevate by the name of opinions. The fact is, that every one has been trying all the plans evolved. One of the many things I admired about Tom Keith was the religious way he stuck to the cautery in treating the ovarian pedicle. Nothing could shake him. I was equally obstinate in my adhesion to the silk ligature. The result was, that when we came to compare notes after many hundreds of ovariectomies, we found that so long as the bleeding from the pedicle is effectually stopped, and the pedicle carefully dropped back into the peritoneal cavity, it does not matter a pin how it has been treated; and that, I venture to say, is a surgical conclusion not only of the utmost importance, but one which never can be contravened. The so-called discussion on special subjects which are now fashionable at our annual gatherings illustrate well how utterly futile our present method of research is. Take the case of the kidney. We have a half dozen men discussing such a question as that of removing a suppurating kidney as a primary operation, or subjecting it to a preliminary drainage, and when you have heard all that they have to say, you are no wiser on the subject. But if four men would subject all their cases to one method, and four others would confine all their work to the second method, within five or six years the question would be definitely and finally settled, and the probability is that we should have determined as a definite conclusion that in all certain well-defined cases the best treatment was the first method, whilst in another class we should probably discover that the alternative was the better choice. The last instance of this kind is the question of lumbar *versus* inguinal colotomy, concerning which I am certain that the shield has a silver as well as a golden side, and that our present method will never enable us to differentiate the two methods.

Some such plan of research as I have described would very clearly indicate in which set of conditions which proceeding ought to be adopted. It may be urged against my proposal that such a plan of research would hamper liberty of action, but I answer that our present liberty of action is not wise; indeed, it is not liberty at all, but license.

*Apostol's Method.*—Let me take a personal case. It is well known that I adopt a special method of treating uterine myoma, and that there is a rival in the field in the shape of the electrolytic method. It is a charge also against me that I will not try the electrolytic method—a charge to which I readily plead guilty—and for this conduct my defense is simple. I say that no logical and complete conclusion can be arrived at by everybody treating everything in every kind of way. Having opened out a

continent I want to know all about it. I pursue, therefore, all the windings of its rivers, and I measure the heights of all its mountains, and I give you the results of my ten years' wanderings. Let the electrolycians do the same, and then you shall be the judges, not upon men, but upon principles. If the primary results of the removal of the uterine appendages are satisfactory enough to justify the experience being continued over an area of about 400 cases, the judgment will rest upon the ultimate and permanent results. If the results of electrolysis are given with the same fullness and with equal authentication and are found to be better than those of surgery, I have no more to say on the subject, and shall take a back seat. But meanwhile I am sure, in the interests of our art, that it is better that I should continue my research in a logical fashion, unhampered by qualifications which would make a just conclusion on your part an absolute impossibility, and which would lead to nothing in my own mind but confusion.

*New Drugs.*—On the other side of this most important question lies another grave source of error, which is too true of our research into surgical results, though it is far more extensive in its results in general therapeutics in the practice of medicine. No sooner is a new drug placed on the market than everybody rushes to try it. At first all is well, and "rubbishin" is good for everything. Then come a few isolated hints about the "toxic effects of 'rubbishin,'" and finally "rubbishin" gets dropped altogether, and we hear no more about it. It is positively awful to think of what some of these new drugs—say chloral, for instance—may have done before they got settled. For the mischief that is done in this way the public is largely to blame, if, indeed, it is not wholly to blame; they like the idea of a new discovery, especially the upper classes, and I am told by men practising near the dwellings of the princes of the land and at fashionable watering places that the great burden of their lives is to keep up with the new drugs and the new dodges. People who live in such houses and such places always have a smattering of such things, and they judge a man harshly who is ignorant of them. For my part, I instinctively distrust men who are always going in for new drugs, and, for myself, I will have none of them.

*New Operations.*—In our surgical results there is too much of the same thing. Take the case of Dieffenbach's operation for squint, a most useful proceeding judiciously applied over a limited area. But I remember the time when every urchin with a squint was collared in the street and walked into the operating room to have one rectus divided in order that its opponent should have full power to swivel the eye out in the opposite direction. Everybody was "doing squints." Similarly when removal of

the uterine appendages was proposed, but long before the just and true principles on which it is now based could be formulated, everybody rushes into the trial of it, and the result was a disastrous epidemic, the chief burden and discredit of which fell upon me.

I was more horrified than I can tell, and much of my time was taken up in disclaiming the doubtful honor of what was called "Tait's operation," in the performance of which every principle advocated by Tait was neglected or deliberately outraged. If the man who engaged in this work had waited for a reasonable trial, a fair discussion, and a just verdict, much discredit for our art would have been spared us. The just verdict has now been arrived at, and the misrepresentation of which this operation was the centre has now ended. But the example is a very telling one in illustrating the want of logical application in our present method of research upon surgical results.

This vast and powerful Association could accomplish almost anything it wished after determining that it was for the good of the world, and after a reasonable method was pointed out for its accomplishment. We tried an expensive experiment in the way of a collective investigation, but from intrinsic reasons it was a failure. The fact is, that its plan was lost in diffuseness and defeated by the machinery involving a vast number of contributors.—in fact, to increase the means of success involved the very essence of increase of risk of failure.

If you want a thing done well, you must either do it yourself or trust it to a very small number of workers. I do not think it would be too much to ask our Association to do, to place every new drug and every proposal for a new surgical proceeding under the observation of a small responsible committee, whose judgment should precede anything like a wholesale experiment by the professional public at large. This step would certainly clear away a vast amount of rubbish, would direct more extended research into definite lines, instead of the indefinite and haphazard roads it now runs upon in almost every instance. And I cannot help feeling it would prevent us doing the great deal of harm which is now done in the early stages of even our best proposals.

My proposal may be crude and impracticable. It may be easily perhaps displaced by some other and better. But if I have only imbued you with necessity for reform I have gained my end and shall have accomplished the object of this Address in Surgery.

#### TREATMENT OF PEDICULI PUBIS.

R.—Vinegar, 5000 parts.

Corrosive sublimate, 1 part.—M.

This is said to be recommended by Brocq.—*Revue Thérapeutique Médico Chirurgicale.*

## THE TREATMENT OF MIGRAINE.

By Wharton Sinkler, M. D., of Philadelphia, Pa.

The drugs which have attracted the most attention of late are, undoubtedly, antipyrine, phenacetin, and the host of antipyretic and analgesic coal-tar derivatives, which have been introduced in the past few years. White claims to have first used antipyrine in headache. At all events, it has been very universally employed in every variety of head-pain since its analgesic properties became known. T. S. Robertson has used it in 88 cases of migraine; in 54 the action was satisfactory in the course of from thirty minutes to two hours, and in 15 cases the administration of other drugs was rendered more effective by the use of the antipyrine. A negative result was obtained in the remaining 8 cases. He recommends that 22 grains be taken at the onset, and in case the headache continues an additional dose of the same size. Bokenham has used the remedy in 26 cases with entire success, but instead of using the large doses usually recommended, he gives only 3 or 4 grains, repeating the dose in an hour, if necessary.

Miller has given phenacetin in migraine and various other forms of headache, but has found that large doses, as much as from 2 to 3 drachms, have been needed to produce good results.

Pesce has used antifibrin with advantage in migraine. P. Guttman uses phenacetin in small doses, and gets as good results as from the use of antipyrine. The great advantage that phenacetin has over antipyrine is that it is much safer, as it does not depress the heart. During the recent epidemic of "grip" phenacetin proved efficacious in relieving the violent headache associated with that disease.

Rabuske, after trying quinine, arsenic, caffeine, antipyrine, electricity, change of climate, etc., was successful in the treatment of a very bad case of long-standing hemicrania by the administration of 8 grains of phenacetin night and morning. The cure was effected after the sixth dose.

Antifebrin has been used quite largely of late. Faust has found this remedy, in doses of  $\frac{1}{2}$  to 1 drachms, of great use, the headache being relieved.

A. L. Clark, has found that 8 to 10 grains of antifibrin will relieve pain in the head in twenty to thirty minutes. S. Merkel, from an experience of 49 cases of migraine and headaches of like nature, considers this a valuable drug. James Little recommends, in the treatment of migraine, that during the intervals between the attacks the following pill be given twice a day:—

Arseniate of sodium,	gr. 1-12
Extract of cannabis indica,	gr. 1-6
Extract of belladonna,	gr. 1-3

He gives in addition to this two grains of valerianate of zinc twice daily. To cut short a paroxysm he gives 20 grains of the salicylate of

sodium in a wineglassfull of water made effervescent by the addition of a dessert-spoonful of the granular citrate of caffeine, a second or third dose to be taken after an interval of two hours.

Nitrate of cytisine (a poisonous alkaloid extracted from the seeds of the *Cytisus laburnum*) has been given by Kräpelin in the angio-paretic form with excellent results in two cases. He gives it hypodermically and was led to use it on account of its power of causing contraction of the blood vessels. In two cases of the spastic form of migraine in which he used it the symptoms were aggravated.

De Schweinitz and Lewis had a certain amount of success in the treatment of hemicrania with the oil of eucalyptus, and I myself had two or three patients in whom this drug was of marked utility. These authors have lately told me that further investigation has proved that its value is by no means general, although certain cases are relieved by its use. In cases where migraine is associated with the gouty diathesis, treatment of the latter is attended with success as far as relief of the headache is concerned. Haig states that he has relieved many attacks in this form of the disease by giving 20 to 30 drops of dilute nitromuriatic acid in water, repeated once or twice at intervals of half an hour.

*Cannabis indica*, which has been given in migraine for many years, still holds a prominent place among the medicinal agents used in its treatment. For myself I may say that I consider it of more value in the majority of cases of migrainous headache. It must be given for some length of time and the dose should be increased until slight toxic symptoms are felt. We must remember the great variability in the strength of the drug, and be careful to begin with a minimum dose. I have but recently seen a patient who had marked toxic effects from  $\frac{1}{2}$  of a grain of the extract. Seguin several years ago pointed out the benefit of *cannabis indica* in the form of headache and insisted on its long-continued use.

Dr. Richard Green, who first recommended Indian hemp in migraine, has continued to use it with success. He maintains that its effect is not simply palliative, but curative, and that in nearly all cases it gives permanent relief. E. J. Overend believes caffeine to be as complete a specific in migraine as quinine is in malarial fevers. He is himself a victim to the affection. He advises the administration of nitrate of caffeine in doses of from 3 to 5 grains as soon as the first indication of an attack is felt, and its hourly repetition until relief is experienced. Electricity is of more or less value and many cases have been greatly helped by galvanism. I have found this means of marked benefit, but have not depended upon it alone in any case. Labbe has cured a severe case of eight years' standing by thirty four applications of static



electricity. A number of other new remedies have been used to a limited extent in this affection. Among them is exalgine, which I found of use in shortening an attack. Ringer has successfully used tincture of nux vomica in drop doses repeated every half hour.

Among the latest remedial agents proposed for the cure of migrainous attacks is hypnotism. In a work on the subject by Albert Moll he expresses his belief that either post-hypnotic or auto-hypnotic suggestion may be used to cure this disease.

Most authors now agree as to the prime importance of hygienic measures in connection with any remedy used for the relief of this disease. Removal from care and work, with fresh air, good food, and change of climate will do more to relieve the frequency of the attacks than any drug. In connection with this the rest-treatment of S. Weir Mitchel is of the greatest value, and I have seen many cases of chronic migraine relieved by this means.—*Coll. & Clin. Record.*

## THE NECESSARY PEROXIDE OF HYDROGEN.

By Robt. T. Morris, M. D., of New York.

Stop suppuration! That is the duty that is upon us when we fail to prevent suppuration.

As the ferret hunts the rat, so does peroxide of hydrogen follow pus to its narrowest hiding place, and the pyogenic and other microorganisms are as dead as the rat that the ferret catches, when the peroxide is through with them. Peroxide of hydrogen  $H_2O_2$  in the strong 15-volume solution is almost as harmless as water, and yet, according to the testimony of Gifford, it kills anthrax spores in a few minutes.

For preventing suppuration we have bichloride of mercury, hydronaphthol, carbolic acid, and many other antiseptics, but for stopping it abruptly and for sterilizing a suppurating wound we have only one antiseptic that is generally efficient so far as I know, and that is the strong peroxide of hydrogen. Therefore I have qualified it, not as "good," not as "useful," but as "necessary."

In abscess of the brain, where we could not thoroughly wash the pus out of tortuous canals without injuring the tissues, the  $H_2O_2$  injected at a superficial point, will follow the pus, and throw it out, too, in a foaming mixture. It is best to inject a small quantity, wait until foaming ceases, and repeat injections until the last one fails to bubble. Then we know that the pus cavity is chemically clean, as far as live microbes are concerned.

In appendicitis, we can open the abscess, inject peroxide of hydrogen, and so thoroughly sterilize the pus cavity that we need not fear infection of the general peritoneal cavity if we

wish to separate intestinal adhesions and remove the appendix vermiformis. Many a patient, who is now dead, could have been saved if peroxide of hydrogen had been thus used when he had appendicitis.

The single means at our disposal allows us to open the most extensive psoas abscess without dread of septic infection following.

In some cases of purulent conjunctivitis, we can build a little cell of wax about the eye, destroy all pus with peroxide of hydrogen and cut the suppuration short. Give the patient ether if the  $H_2O_2$  causes too much smarting. It is only in the eye, in the nose and in the urethra that peroxide of hydrogen will need to be preceded by cocaine (or ether) for the purpose of quieting the smarting, for it is elsewhere almost as bland as water.

It is possible to open a large abscess of the breast, wash it out with  $H_2O_2$ , and have recovery ensue under one antiseptic dressing, without the formation of another drop of pus.

Where cellular tissue is breaking down, and in old sinuses, we are obliged to make repeated applications of the  $H_2O_2$  for many days, and in such cases I usually follow it with balsam of Peru, for balsam of Peru, either in fluid form or used with sterilized oakum, is a most prompt encourager of granulation.

If we apply  $H_2O_2$  on a probang to diphtheritic membranes at intervals of a few moments, they swell up like whipped cream and come away easily, leaving a clean surface. The fluid can be snuffed up into the nose and will render a fetid ozæna odorless.

It is unnecessary for me to speak of further indications for its use, because wherever there is pus we should use peroxide of hydrogen. We are all familiar with the old law, "*Ubi pus, ibi evacua*," and I would change it to read, "*Ubi pus, ibi evacua, ibi hydrogenum peroxidum infunde*." That is the rule. The exceptions which prove the rule are easily appreciated when we have them to deal with.

Peroxide of hydrogen is an unstable compound, and becomes weaker as oxygen is given off, but Marchand's 15-volume solution will retain active germicidal powers for many months, if kept tightly corked in a cold place. The price of this manufacturer's preparation is about 75 cents per lb., and it can be obtained from any large drug house in this country. When using the  $H_2O_2$  it should not be allowed to come into contact with metals if we wish to preserve its strength, as oxygen is then given off too rapidly.

$H_2O_2$  must be used with caution about the hair if the color of the hair is a matter of importance to the patient, for his drug, under an alias, is the golden hair bleach of the *nymphs disparæ*, and a dark-haired man with a canary-colored moustache is a stirring object.—*Journal of American Medical Association, August 9, '90.*



## THE LOCAL TREATMENT OF DIPHTHERIA AND SCARLET-FEVER THROAT.

I have lately had much experience with the treatment of these affections, and have found that hydrogen peroxide, fifteen volumes strength, alone or combined with bichloride of mercury, gr. j. to 3 j., gives no better satisfaction than any other kind of remedy. Hydrogen peroxide is a thorough antiseptic, besides acting mechanically in getting rid of the membrane; it does the latter in the later or more dangerous stage, for it is at this time that septic infection is more liable to occur. When the membrane begins to slough, the peroxide will, when applied with a mop or in spray or as a gargle, get behind it, and by its action on the pus, free oxygen and carbonic acid gas, thus displacing it; the membrane appears under its action to lose all its toughness and crumble. If used in the nose—and it is here where we get wonderful effects—the peroxide had better be made of about ten volumes strength, and if the bichloride is combined with it, make it only gr.  $\frac{1}{2}$  to 3 j. or in very young children still weaker. Before closing, I must add that but a small quantity of the medicine should be bought at a time, as it degenerates rapidly unless kept on ice in a dark place, and not agitated. The hydrogen peroxide losing strength so rapidly makes it very difficult to get it pure, so any one who should be disappointed in its action should not give up the use of it until he has surely tried the pure article. It will not, of course, cure all cases. Another point in its favor is, that when used in the throat it causes no pain. The action of the hydrogen peroxide, its thorough antiseptic, and the beautiful, mechanical action in forcing pus from cavities, is well known. It should never be used in a cavity unless there is free vent, and especially when this cavity is about the neck; as such a volume of gas is liberated. Such an accident as I came very near having is quite possible. An abscess of the parotid gland following scarlet fever had been opened by a small incision. I thought I would wash it out with a little hydrogen peroxide, which I proceeded to do. As a result, I had a tremendously distended sac, the child blue in the face, and nearly suffocated. A large, free incision set matters right in a moment. As an application, and, when the patient is old enough, as a gargle, pure or half and half with listerine, it is the best application in scarlet fever and follicular anginalitis I know of.—*Prof. W. Cheatham, M. D., of Louisville, Ky. in N. Y. Medical Journal.*

## A SIMPLE OINTMENT FOR PRURITUS.

Balfour reports that he has almost never failed to obtain prompt relief, in cases of pruritus of the anus and vulva, from an ointment containing eighty grains of calomel to the ounce of vaseline or other unguent.

## PRESCRIPTION FOR PSORIASIS.

The favorite prescription of Mr. Jonathan Hutchinson for psoriasis is:

R Acid chrysophanic,	gr x
Liq carbonis deterg.,	℥ x
Hydr. amm. chlorid.,	gr x
Adip. benzoat.,	3 i
M. fiat ungt.	

At night the patient should wash the diseased surfaces free from all scales; then, standing before a fire, rub on the ointment, devoting, if possible, half an hour to the operation. This proportion of chrysophanic acid is not irritating, and stains the linen but slightly. With some cases even a weaker chrysophanic ointment is entirely sufficient. Internally, Mr. Hutchinson prescribes arsenic, though he is not convinced that it is an important adjunct.—*Archives of Surgery.*

## DISEASES OF THE EYE AND EAR.

I am prompted to make these suggestions by a knowledge of the fact that by far the greater number of patients with eye or ear disease, fall under the care of the general practitioner who, in student days, found these subjects not only dull and uninteresting, but complicated—hence he has simply attempted to get the general principles, without a thought of obtaining a thorough mastery of the subject—a thing difficult of accomplishment, when professor and text-book both dwell so much upon details. I felt this keenly myself when in general practice, and have heard frequent reference to, and seen many illustrations of it, since I devoted special study to these diseases. I shall, in a general way, and briefly, attempt to give simply the treatment of those diseases most frequently seen, by suggesting the use of a few remedies which will be useful to the greatest variety, and hurtful to but few, or none of those diseases liable to be mistaken for one another.

The most frequently observed disease of the eye is *catarrhal conjunctivitis*, or ordinary "cold" of the eyes, which with simple cleanliness is, in many instances, a self-limited disease. A cure can be hastened, however, by local applications; and in the choice of these, preference should be given to the milder forms of eye-washes, for they are in nine cases out of ten equally as efficacious as the stronger applications. They are not unpleasant to the eye, and can do no harm. If inflammation of the eye (conjunctiva) assumes an active type, there is apt to be hyperæmia of the iris, which readily passes into inflammation of that structure, under the influence of strong applications to the lid or globe; and the same may be said of the cornea—hence the safety of mild remedies, and the danger of strong ones.

Either of the following prescriptions will meet the indications of a mild eye-wash:

1. A solution of common salt (grs. x ad 3 j).
2. A saturated solution of boracic acid (grs. xv ad 3 j).
3. R. Sodii biboratis ʒ iv, aquæ camphoræ, aa 3 ij. M.
4. R. Zinci sulphatis gr. j, acidi boracici ʒ 3, aquæ 3 iv. M.

These may be freely applied to the eye, without fear of harm. As examples of what I consider the stronger eye-washes, I may cite solutions of copper, of zinc, of alum, of nitrate of silver, of acetate of lead, as strong as five or ten grains to the ounce.

The next disease of the eye in order of frequency is inflammation of the cornea, or *keratitis*, which is sometimes associated with catarrhal ophthalmia just considered, and in many instances the casual observer will place the two diseases in the same category. And yet, the strong applications, which the inflamed conjunctiva would stand, not only with impunity, but with marked benefit, might seriously endanger an eye afflicted with keratitis. Here treatment *must be mild*, if safety of the eye is consulted. Any one of the prescriptions which I have suggested can be used with benefit and without danger, and it is well to use in addition some soothing application as R. Atropiæ sulphatis, cocain. muriat. aa gr. ij, aquæ 3 j. M. Sig.—Put two drops in the eye three times a day.

Another disease of the eye—inflammation of the iris, or *iritis*—is often seen, and it, too, has so many symptoms in common with the diseases already considered that it is liable to be mistaken for either. Here all the usual eye-washes are objectionable—their danger increasing with their astringency. The prescriptions which I have given are at least open to this objection—and while they can do no good, they can hardly be considered as dangerous. The sheet-anchor here is atropia, which can be advantageously combined with cocaine, four grains each of cocaine and atropine to the ounce of water. This should be used sufficiently often to keep the pupil dilated, and until the eye is free from redness. Attention of course should be given to the general health in every instance. Either the syphilitic taint or the rheumatic habit will usually be found with iritis. Whenever the eyeball is red and inflamed, with dread of light, or haziness of the cornea, or a contracted or sluggish pupil, rely upon atropine and cocaine, and use no stronger application than a solution of boracic acid. When an absence of these symptoms shows that the trouble is in the lids, stronger applications are admissible.

A few points about the diseases of the ear, and I shall cease.

Ordinary *ear-ache* is an inflammation of the middle ear, and when the process goes on to pus-formation, an abscess on the inner side of

the drum membrane is the result. The pressure from the pent-up pus causes a rupture of the drum, through which the matter escapes. This is often an end to the trouble, but frequently the inflammation continues—the opening in the drum remains—disease of the bones of the ear develops, and a more or less continuous discharge, an otorrhœa, is the result. If hot water be liberally and frequently injected into the ear through a douche, the inflammation will usually be stopped and a cure effected. Two or three drops of hot laudanum dropped into the ear will often accomplish the same purpose. After the discharge appears it can ordinarily be checked by syringing the ear often enough to keep it clean with warm water containing boracic acid in the proportion of fifteen grains to the ounce; and if, in addition to the syringing, a little pulverized boracic is blown into the ear through a quill or tube, after the ear is cleansed, this treatment will usually suffice to cure an otorrhœa.

In removing plugs of wax, or foreign bodies which have gained access to the ear, it is better to rely upon some warm water and a syringe, than resort to instruments. It is not only easier but more efficacious and safer. With the most delicate touch, it is as difficult to handle an instrument with precision in the deep and small cavity of the ear, as it is to avoid inflicting injury to those delicate parts which may be more serious than the trouble for which it was undertaken.—Dr. James L. Minor, in *Memphis Jour. of Med. Science. Med. Summary.*

### THE PROPER TIME TO ADMINISTER QUININE

In the *Annales de Thérapeutique Médico-Chirurgicales*, July, 1890, Charpentier gives the following directions as to the administration of quinine:

1. The action of quinine is chiefly felt about six hours after its ingestion, and for this reason it should be given, not at the time of an expected malarial paroxysm, but six hours before.

2. In the case of quotidian fever the quinine should not be given six hours before the chill, but eight hours before, so that the full effect may be present two hours before the chill, for though the chill is the apparent onset, the real onset is still earlier.

3. When the fever is tertian, Charpentier thinks that the quinine should be used twelve hours before, and where it is quartan, eighteen hours before the attack is expected.

The drug should be given in massive doses, not in fractional doses, for the reason that it is rapidly eliminated by the urine, and in small amounts would have no effect; although when the stomach is too irritable to stand heroic amounts, fractional doses should be given every three-quarters of an hour.

## Correspondence.

### LETTER FROM PARIS.

*The Apostoli Clinic—Electro-therapy applied to the Treatment of Diseases of Women—A Buffalo Doctor's Opinion of the famous Electrologist and his Work—He is pleased—The "Yarns" heard in America are all Bosh as to the Suffering the Treatment causes—Apostoli is enthusiastically defended.*

First of all, I may say that Paris is not a good place to do post-graduate work. The hospitals are widely separated from one another, and the hours of service are in the morning. Moreover, there are but few special hospitals; in fact, the abdominal and gynecological surgery is done by the general surgeons connected with the various large institutions.

Fortunately for the medical man who is visiting Paris and anxious to do some good general work, the Rue de Jour, or Apostoli clinic, takes place in the afternoons of Tuesday, Thursday, and Saturday. So, in this respect, it does not interfere with his work in the general hospitals. Like other dispensaries and private clinics, it is decidedly more attractive inside than out. In fact, one's first impression of this somewhat noted institution is an experience similar to Lawson Tait's. At first one shrinks back, and wonders whether women are compelled to walk through that gloomy court and ascend two staircases to get their medical treatment. The hospital consists of five rooms, plainly furnished, but very clean and nicely cared for, with an average attendance of from thirty to thirty-five patients daily.

Besides Dr. Apostoli, there are two assistants, and one of these, his *chef*, treats the patients. The histories of the cases are taken very carefully, and daily records kept. When a patient is seen for the first time, the history is read, an examination made, and the course of treatment outlined and begun at the next visit. The diagnosis is made, and several medical men (and often one sees visitors of national reputation present) are invited to corroborate it, if possible, and give reasons for their opinions. I must say I have been particularly pleased with Apostoli, and can, in all fairness, say that he is a brilliant diagnostician, and what work he does is done with an earnestness and honesty which are truly commendable. What his earlier utterances and claims may have been, I know not, but the position which he now takes in reference to electro-therapy, as applied to diseases of women, is not as extravagant as we in America have supposed. He is a man of great individuality and force of character, and thoroughly

sincere in his work. His attention to strangers, his courtesy and politeness, and his desire to have the details of treatment thoroughly understood by them, is very gratifying indeed. Like other men who have worked in special lines, he has formed opinions which he, by his argument and experience, is prepared to substantiate. Much that he says I cannot say that we all agree with him in, yet I am often struck with the probable truth of his utterances. He believes but little in pessaries and supports of any kind, and but very exceptionally employs them. Moreover, he takes the position that *most* lacerated cervixes and misplaced wombs are the cause of little trouble in themselves, and only give rise to symptoms when some perituterine inflammation is also present.

One sees a great many fibroids of all sizes and in various locations. Some are extremely large and have been under observation for many years. There is no doubt that the distressing symptoms that these women complained of have been relieved, and they have been enabled to work with comfort and satisfaction. By careful measurement with the tape externally, from various prominent points, and with a small instrument which is used to measure the thickness of the skin and superficial fat in the abdominal walls, one can easily see that, in some cases, a diminution in the size of the tumor has taken place; and in exceptional cases the tumor has disappeared. I sometimes feel that upon the grounds of cosmetic surgery, even although no active symptoms are present, some of these very large tumors ought to be removed, and particularly when seen in young women. I have visited the clinic regularly, and can say that the work done is good. The strictest antiseptic precautions are observed. All patients have an injection before and after a treatment, and all electrodes are placed in boiling water, and afterward in a saturated solution of iodoform.

I have been most interested in the use of the faradic current, and in galvano-puncture. I have seen many women extremely sensitive to pain—indeed in whom the lightest pressure over the womb and ovaries caused agonizing suffering—relieved of all their pain after a fifteen minutes' seance with the faradic current of tension. In exceptional cases one or two treatments has cured the subjective evidences of their trouble, while upon examination the pathological condition was the same as upon the first application, showing us that what Apostoli claims is evident, viz: that, although the gross manifestations of the disease are not overcome, the symptoms are relieved and the flow permanently so.

I have also seen much good from galvano-puncture. After having treated a woman suffering with a mass of cellulitis for six weeks with positive galvanism—which by the way is nearly always employed, as most patients suffer from

pain or hemorrhage—with little benefit, Dr. Apostoli punctured the spot with his usual precautions, with much satisfaction to himself and gratification to his patient. The punctures are never deeper than one-eighth of an inch, and the needle employed has a small point, protected by a sheath up to the spot desired to enter the tissues. The strength of current is twenty-five to thirty ma. galvanis. Resolution took place and no bad symptoms developed. The yarns, that we have heard in America of the agony these women are made to suffer is all bosh, because one of the first rules of all electro-therapy is to stop the current if not well borne by the patients. Some patients take with ease, and without flinching, 130 to 150 ma. of current. Much care is taken to see that the skin is in no place abraded, and also that the clay-pad is thick over all sensitive areas.

At present there is quite a revolution of feeling in Paris among the profession, as to the claims of Apostoli. The operating surgeons say electricity is no good, and will do nothing for the diseases said to be benefited and cured by Apostoli and his followers. At a meeting of the Society of Practical Medicine of Paris, of which Apostoli is a member, a commission was appointed to investigate his work at his request. Consequently, every day a number of old patients treated years ago are examined by one of this commission, and their present condition noted and compared with that previous to treatment. The new patients are carefully examined, and a diagnosis made and compared with that of Apostoli, and the treatment is begun. This naturally makes the work very interesting to us all, and each one of us visiting the clinic are delighted to see how frank and honest Apostoli is in all of his work. To say that he is unscientific and uneducated is unfair, and to accuse him of quackery and dishonesty is an infernal libel. Enthusiastic? Yes; one capable of working with indefatigable energy, true; and, at the same time, full of a desire to do what is best for those women who place themselves under his care. In this impression I am sure I am borne out by every man who is to-day visiting the Rue du Jour.

I have attended Terrier and Champonnier, and other solid abdominal surgeons in Paris, and I believe the best work is done by Terrier. His hospital—Hôpital Bechat—is a modern institution, and thoroughly equipped for all kinds of scientific work. Here asepsis is arrived at. He has a splendid operating room, with glazed walls and ceilings, and the floor of cement. It is divided into two portions, separated by iron doors. The one room is for old suppurative cases, and the other for non-septic ones. The instruments are sterilized by heat, and put into sterilized hot water. The napkins and towels are also treated by a special process, and made sterile. No antiseptics are

used, excepting to wash the body of the patient and the operator's hands, and salve or iodoform is applied on the wound, with antiseptic gauze over it.

I saw him perform an abdominal hysterectomy last week, for a very large uterine fibroid. An incision was made about two inches above the umbilicus, extending to the pubes. There were no adhesions; consequently, when the peritoneal cavity was fully opened, the great mass could be rolled out of the abdomen. The interesting feature was the treatment of the pedicle. A long steel bodkin was pushed through the mass as near the vaginal vault as possible. A piece of rubber tubing—solid—was firmly drawn and fully stretched under this steel pin, and tied with silk. The tumor was amputated, and the pedicle was left about an inch in length. The center was dissected out and seared over with the thermo cautery, then the edges were brought together like the flaps of a stump and sewed firmly and finely with silk sutures. The steel wire was removed and the stump was returned into the abdominal cavity and the rubber ligature left in situ. (!) It was a very brilliant operation, and made one feel proud of the triumphs of surgery. I have also seen him perform many other tube and ovary operations, and a few days ago a hysteropexie or ventrofixation, which also pleased me very much. The woman was fifty years of age, and suffered from extreme procidentia uteri, complicated with pyosalpingitis. An abdominal incision was made of good length—in fact, these men always make large openings—and the tubes and ovaries carefully removed. Both tubes (!) were cystic and filled with pus. The abscess was then pulled up and four silk sutures were passed through its anterior surface, leaving about one inch of uterine tissue within their grasp. Each suture was carried into the peritoneum of the corresponding side, and then firmly drawn together; holding, therefore, in their grasp, the uterine wall and the peritoneum of the incision. The rest of the peritoneum was picked up and sewed, then the fascia, and finally the skin. A drainage-tube was left in the abdominal cavity.

Dr. Terrier told me he knows of a woman in whom a hysteropexie was performed—the tubes and ovaries being left in—who conceived and carried her ovum to term. Unfortunately one does not see only brilliant, good, and justifiable surgery; but, on the contrary, the most wholesale mutilation of women. It is only a few days ago when one of the first men in Paris diagnosed an enlarged and painful ovary, on the right side. Immediately the young woman was placed on the table and an abdominal section made. When the abdomen was opened, the ovary in question was found to be normal, but the opposite tube was slightly bound down; so, in order to take advantage of the incision, this tube and ovary were gouged out. Another

similar case was the ovaries for a small bleeding fibroid, the operator having no faith in other so-called *unscientific procedures*. If Apostoli has done nothing more than demonstrate the possibility of relieving the pain and hemorrhage in these cases, surgery should welcome his work, in the interests of humanity.

And now let me say a word about hemorrhage. I believe we have made mistakes in our technique, when we don't succeed in controlling the bleeding. I have seen cases come to the clinic who bled profusely after an examination. Indeed, I am sure one woman lost at least six ounces of blood. In these cases Apostoli uses the largest carbon electrode that is possible to be introduced into the uterine cavity, and endeavors to touch the whole internal surface of the womb. This treatment lasted about ten minutes, with the effect of completely arresting all hemorrhage for several days. About sixty ma. positive galvanism was given.

I have also attended Guignon at the Hôpital Necker, but I am not pleased with the French methods of operating for stricture of the urethra. Seldom do they perform a primary urethrotomy, and are satisfied with the use of much smaller sounds than we in America; in fact, the French urethral surgeon practically disregards Otis's ideas of the normal caliber of the urethra.

H. E. HAYD.

PARIS, June 24, 1890.

—*Buffalo Med. and Surg. Journal.*

#### ANTISEPTIC TREATMENT OF WOUNDS.

Sir Joseph Lister, at the International Medical Congress in Berlin, gave an address on the present position of antiseptic surgery. In the beginning of his speech he alluded to the scavenger-cells or phagocytes discovered by Metschlikoff, the white blood-corpuscles which envelope parasitic intruders and render them harmless. He then spoke of the antiseptic treatment of wounds, declared his preference for sublimate over other disinfectants, especially cyanide of mercury, and drew attention to the degrees of dilution of sublimate which he had found advisable. The purpose was to avoid irritating the wound-surfaces as much as possible, for which reason one must use weaker solutions for the more sensitive tissues. In operations in the pleural cavity drainage was necessary, as well as the antiseptic bandage. He had given up the use of the spray some years ago; it could be of value at most only for the continuous disinfection of the operator's hands. It might easily do harm, because the motion of the air produced by it might carry off germs with it and convey them to the wound, not to mention that the use of spray sometimes led to the neglect of other antiseptic precautions. He advised the leaving of complicated contusion wounds open at first.—*The Lancet*, August 16, 1890,

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#### EDITORS:

A. LAPTHORN SMITH, B.A., M.D., M.R.C.S., Eng., F.O.S., London  
F. WAYLAND CAMPBELL, M.A., M.D., L.R.C.P., London.

#### ASSISTANT EDITOR:

ROLLO CAMPBELL, C.M., M.D.

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MONTREAL, NOVEMBER, 1890.

## THE USE AND ABUSE OF PEPSIN.

One of the most prevalent diseases of our day is that aggregation of symptoms grouped together under the name of dyspepsia. In these days nearly everyone has it, from the little babe overfed every quarter of an hour, covered with scabs and scales and writhing with colic, to the elderly men and women who eat many times more than they require in a half or a quarter of the time that would be required for mastication. There is dyspepsia from eating too often; there is dyspepsia from eating too much. There is dyspepsia from mental worry and dyspepsia from physical fatigue. There is dyspepsia from the counter lunch and dyspepsia from the vile boarding house cuisine. And the worst of it all is that very few doctors know anything about it. So that if the patient is a workingman or woman he must stay at home and fight his trouble out without relief, while his wealthier brother in misery can be ordered away and take his trouble with him under the fashionable title of malaria. Why the disease is so little understood is easy to understand. Pathologists are too busy

studying up spinal sclerosis and giant-celled sarcomas, and clinical teachers have no room in their wards for such common every day diseases as dyspepsia. Many a young doctor could handle a case of endocarditis without hesitation who would be completely non-plussed by the appearance of a bad case of dyspepsia. What wonder then that in his dilemma he turns to the manufacturing pharmacist. Of course from the latter's point of view it might seem very hard that any one should do any digesting for himself when beautiful shiny scales or powder of pepsin can be procured for five dollars an ounce, and it is his business to sell his products by any fair means in his power. No better ally could he have than the young doctor who does not understand dyspepsia. And at first sight what more reasonable method of making *dyspepsia* *easy* pepsia than by ordering pepsin?

But unfortunately for the chronic dyspeptic there are certain physiological laws to be observed, and one of them is that whenever a natural function is performed artificially nature will cease to do it herself. Thus the wearing of spinal supports will increase lateral curvature, because the already weak muscles will become still weaker when their work is done for them. Riding in a carriage all day will cause atrophy of the muscles of the legs; eating food which does not require mastication will lead to atrophy of the teeth; and providing pepsin for the digestion of each meal will surely lead to atrophy of the stomach. Nevertheless there are times when pepsin is useful, and they are very clearly shown in a paper by Dr. Gustavus Elliott in the *N. Y. Medical Record*, the conclusions of which are as follows:—

1. Patients suffering temporarily from the ingestion of an excessive amount of nitrogenized food may obtain relief by taking pepsin, but it is very much more important that they should be warned of the evil consequences which will result from the repetition of such over-indulgence

2. When annoying symptoms are the result of imperfect digestion of nitrogenized food, which has been taken in moderate amount, and when this is due to a deficiency in the quantity or quality of the gastric juice, it is more important to endeavor to increase the secretion of the gastric juice, than to try to supplement the deficiency by the administration of an artificial pepsin.

3. In acute or chronic indigestion, or dyspepsia, pepsin is sometimes of great value for the immediate and transient relief of distressing or debilitating symptoms, while other measures are being employed to restore the digestion to its normal activity.

4. During the course of, and during convalescence from, certain acute diseases, as well as in some chronic diseases, characterized by transient weakness of the digestion and defective assimilation, pepsin is of considerable value in assisting to increase the assimilation of food.

5. When used for the cure of chronic indigestion and dyspepsia, pepsin is a snare and a delusion, giving a transient feeling of comfort, without increasing the digestive power of the stomach.

We commend these remarks to the thoughtful consideration of our readers.

#### EDUCATION OF THE SENSE OF SMELL.

In these days when so much progress is being made all along the line in the art of making certain diagnoses, one cannot afford to despise any of the senses which may detect something that will increase our exact knowledge of the condition present.

A correspondent, signing himself "Schneider," in the *New York Medical Record*, October 18, very properly calls attention to the value of the sense of smell to the practising physician, and he thinks that more attention should be paid to the cultivation of this sense. Visual objects, he remarks, can be accurately described and recorded so as to be again recognized, but smells can only be vaguely described or compared with some other universally known odor. He

does not give us very much information as to the significance of the different odors one meets while practising our profession, except the smell of pyæmia, and another smell which he does not quite understand, in the breath of persons who looked sick and anæmic. We can, we think, add a few points for the use of physicians, and which we would recommend especially the young members of the profession to carefully note.

First. There is the odor of tobacco which should be noticed especially on male patients, and which will put one on the track of palpitation of the heart, vertigo, constipation, torpidity of the liver, with one of its reflex consequences—asthma. Then there is the faecal odor of the breath, which may be noticed in both males and females suffering from absolute or relative constipation; in other words, in whom there is a greater or less amount of decomposed material in the digestive tract, the gases from which are reabsorbed into the blood and eliminated by the breath. There is also the sour breath from the mouth of patients suffering from dyspepsia. Then there is the dead bone smell of decaying teeth, and there is the delicious odor of new milk which is characteristic of health in women. Then there is an odor perceived, alas, too often, of partially burned alcohol, which in the habitual user, acquires a horrible perfume of a mixture of coal oil, methylated spirits, fusil oil and turpentine. It is also not unlike the smell of naphtha. This is very different from the pleasant odor of alcohol before it is drunk. It seems to acquire by partial combustion, this totally different and disgusting odor. There is also an odor with which we are not very familiar, of diabetes, and the most horrible odor of all comes from gangrene of the lungs.

We often say to our students, let no patient pass them without at least feeling the pulse, looking at the tongue, and taking the temperature. If these three are all right, the patient will not be very sick; but we will add in future, the smelling of the breath, to the three other means of diagnosis.

## BOOK NOTICES.

**ESSENTIALS OF ANATOMY AND MANUAL OF PRACTICAL DISSECTION.** By C. B. Nancrede, M.D. Third edition, revised and enlarged. Colored plates and wood cuts. Philadelphia: W. B. Saunders, 1890. Price, Cloth or Oil Cloth, \$2.00.

The third edition of Nancrede's Anatomy which has just appeared, is a manual of usefulness and value. The publisher has greatly added to the book by the introduction of a large number of beautifully executed plates, which were selected by Dr. Edward Martin, owing to the author's absence from Philadelphia. We have never before seen a book which contained so much in a small space, and yet served as an atlas, quiz-compend, and text-book at one and the same time, which was not so far removed from the grasp of the ordinary student by its cost as to be useless as an aid to general anatomical study. Three editions in less than two years is a success to be envied, and we doubt not that the sales will be doubled during the next year for as a Dissector's manual we know of no superior.

**A PRACTICAL TEXT-BOOK OF THE DISEASES OF WOMEN,** by Arthur H. N. Lewers, M.D., Lond. M.R.C.P. Lond., Assistant Obstetric Physician to the London Hospital, &c., &c. Second edition, with 146 Illustrations. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street, 1890.

This book is the very ideal work for which the student often wishes, but seldom obtains. The arrangement of the little volume is systematic and concise, so that any subject can be found without trouble. All the articles are fully abreast of the many recent advances in Gynecology. The woodcuts are numerous, and the letter press excellent, being large, clear, and distinct, and printed on the best of paper. Its size is also extremely convenient, so that we can without hesitation recommend it to final year students.

**ESSENTIALS OF GYNECOLOGY.** Arranged in the form of Questions and Answers, prepared especially for Students of Medicine. By Edwin B. Cragin, M.D., Attending Gynecologist to the Roosevelt Hospital, Out-patient Department, Assistant Surgeon to the New York Cancer Hospital, &c. With 58 Illustrations. Philadelphia: W. B. Saunders, 913 Walnut Street. London: Henry Renshaw. Melbourne: George Robertson & Co., 1890.

After a careful perusal of this little work we can heartily endorse the following preface:

No one appreciates more fully than the Author

the inadequacy of this little work for a thorough study of Gynæcology. This has not been the aim. He only hopes that as a means of review and as a summary of the results of more extensive reading, the student may find the work of some value. The Author wishes also to state that in its compilation he has freely consulted, and made use of, the standard works of Hart and Barbour, Thomas, Schröder, The American System of Gynæcology, notes on the lectures of Prof. Geo. M. Tuttle at the College of Physicians and Surgeons, New York, and numerous journals.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS, CO., consisting of Original Treatises and Reproductions in English, of Books and Monographs selected from the latest literature of foreign countries, with all illustrations, etc. Contents: Suppuration and Septic Diseases, by W. Watson Cheyne, M.B.; Pharmacopœia for Diseases of the Skin, by James Startin; The Nasal Neuroses, by Granville Macdonald, M.D.; Artificial Respiration: The Theory and Practice by Benj. W. Richardson, M.D.; The Newborn Infant—Its Physiology, Hygiene, and Nourishment, by Dr. A. Auvar; The Urine in Neuritic Diseases, by Dr. Alexander Peyer. Published monthly. Price, \$10.00 a year, single copies, \$1.00. October, 1890. New York: William Wood and Company, 56 and 58 Lafayette Place, 1890.

The November number of the *Sanitarian*, forthcoming, will begin the publication of the Transactions of the American Climatological Association held at Denver, Col., September 2, 3 and 4, 1890. All new subscribers for the *Sanitarian* for 1891 sending their subscriptions before the 15th of November, will be supplied with the November and December number gratis. Subscription, \$4.00 a year, in advance. All correspondence should be addressed to the Editor—A. N. Bell, M.D., 113A Second Place, Brooklyn, N.Y.

## PERSONAL.

Dr. Francis W. Campbell, one of the RECORD staff of Editors, returned from England by the Allan Royal Mail SS. "Parisian" the end of September.

## NEWS ITEMS.

AMERICAN ACADEMY OF MEDICINE.—The next Annual Meeting will be held at Philadelphia, Pa., on Wednesday and Thursday, December 3rd and 4th, 1890. Any Fellow who may desire to present a paper will please forward its title,

as soon as possible, to the Secretary, that it may be entered on the programme. Any one not able to attend can forward his paper, to be read at the meeting. The Constitution was altered at the last Annual Meeting, so as to admit, in addition to those possessing the degrees of A. B. and A. M., those who can present evidences of preparatory liberal education equivalent to the same. The Secretary will forward blank forms of Application for Fellowship to any Fellow who may wish to propose new candidates. Dr. J. E. Emerson, Detroit, Michigan, Chairman of Committee on Eligible Fellows, will, in a few days, forward to every Fellow copies of the amended Constitution and By-Laws, List of Members, and other information as to the Academy. Richard J. Dunglison, Secretary, 814 N. 16th Street, Philadelphia, Pa.

Dr. Paul Gibier, Director of the New York Pasteur Institute, informs us of the results of the preventive inoculations against hydrophobia performed at this Institute since its opening (February 18th, 1890). To date 610 persons, having been bitten by dogs or cats, came to be treated. These patients may be divided in two categories:—1st. For 480 of these persons it was demonstrated that the animals which attacked them were not mad. Consequently the patients were sent back after having their wounds attended, during the proper length of time, when it was necessary. *Four hundred patients of this series were consulted or treated gratis.* 2nd. In 130 cases the antihydrophobic treatment was applied, hydrophobia having been demonstrated by veterinary examination of the animals which inflicted bites or by the inoculation in the laboratory, and in many cases by the death of some other persons or animals bitten by the same dogs. All these persons are, to-day, enjoying good health. *In 80 cases the patients received the treatment free of charge.* The persons treated were: 64 from New York, 12 from New Jersey, 12 from Massachusetts, 8 from Connecticut, 9 from Illinois, 3 from Missouri, 3 from North Carolina, 3 from Pennsylvania, 2 from New Hampshire, 2 from Georgia, 2 from Texas, 1 from Maryland, 1 from Maine, 1 from Kentucky, 1 from Ohio, 1 from Arizona, 1 from Iowa, 1 from Nebraska, 1 from Arkansas, 1 from Louisiana, 1 from Ontario (Can.)

## CEPHALALGIA.

Prof. Weir Mitchell has shown that tincture of eucalyptus given in doses of 5 drops, in gelatin capsules, four to six times daily, is very efficacious in headache. This treatment gives peculiarly satisfactory results in cases where there is cerebral congestion.—*L'Union Médicale*. Aug. 5, 1890, p. 176.



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## Original Communications.

### CONSTANT GALVANIC CURRENT IN GYNECOLOGY.

RESUME OF A PAPER READ BY DR. APOSTOLI  
BEFORE THE INTERNATIONAL MEDICAL  
CONGRESS AT BERLIN, AUGUST, 1890.

[Communicated specially to the CANADA MEDICAL RECORD.  
Translated by Dr. Lapthorn Smith.]

First. The constant galvanic current finds its principal specialty in gynecology, in endometritis and fibroids. Sovereign against troubles of the circulation and pain (amenorrhœa, dismenorrhœa and metrorrhagia) it is a valuable assistant for arresting the progress of benign tumors and for helping to absorb peri-uterine exudations; it exercises a very beneficial resolvent action in many peri-uterine phlegmasias and in certain cases of catarrhal salpingo ovaritis; but it is insufficient and even injurious in large doses, especially if the intra-uterine pole is negative, for suppurating inflammation of the appendages. Its varying intolerance, which increases with the inflammatory condition of the appendages, should serve as a valuable means of diagnosis, pointing towards the existence, and explaining the nature of collections of fluid, either bloody or purulent, about the uterine, which may be unsuspected or only sus-

pected, and should serve to hasten in such cases, a surgical operation, which may have been put off or refused.

Second. The effects of the constant galvanic current are polar and intra-polar.

The intra-polar trophic and dynamic effect, which increases in proportion to the square of the intensity, is superadded to the polar action. The latter utilizes each pole for a different purpose. Apostoli discovered the heating effect, afterwards developed by the passage of the current (which increases the interstitial circulation), and finally the antiseptic action of the positive pole, of which Apostoli and La Guerriere have each just recently made an experimental demonstration:

Third. High galvanic applications employed in a varying manner, from 50 milliamperes in strength, according to the tolerance of the patients, and the varying clinical indications form the fundamental base of Apostoli's method, and find their justification.

(a). First, by utilizing circulatory drainage, which is the direct consequence of the calorific action due to the resistance offered to the passage of the current, and which is in proportion to the square of the intensity.

(b) In the antiseptic or microbe-killing action which increases with the intensity.

(c) In the rapidity and efficacy of the

effects which it produces, and which are in proportion to the square of the electrical energy, according to the analogous formula for the measurement of the energy of other natural forces.

(*d*) In the more easy generalization of the method in rebellious cases (hard and sub-peritoneal fibroids, fungus endometritis etc.) and for young women.

(*e*) In the avoidance of relapses, which, other things being equal, will be so much the less to be feared, as we have made the applications more intense.

Fourth. If the vaginal application of the galvanic current (which is the method invented by M. Caron for fibroids, only applied since by A. Martin, Onimus, Charpentier, Mundée, etc.) does give any results, they are very much less than those following intra-uterine applications, which should always be the method of choice.

(*a*) Because it utilizes to the greatest extent the maximum of the current and of its energy.

(*b*) Because it utilizes the anti-septic action of the positive pole which is altogether local, and which is extinguished in the intra-polar circuit and at the level of the negative pole.

(*c*) Because it brings into action the derivative and caustic effect of the intra-uterine application, treating thus at one stroke, either mere metritis or endometritis, which is so often the complication both of fibroids and peri-uterine inflammation, and assuring in this manner a more rapid, more complete and more permanent cure, because it allows better than vaginal application, of diminishing pain and of rendering high doses more bearable, and because it ensures a greater efficiency in rendering possible an increase of the intensity applied—the bloody flow which it brings on.

Fifth. Vaginal galvano punctures made a few millimetres in depth (two to five) by means of a filiform trocar made of gold, and insulated all of its extent except the point,

form, sometimes, a very valuable part of the intra-uterine therapeutics created by Apostoli :

(*a*) In better localizing the galvanic action, and (*b*) in rendering more efficient in certain cases the application of small or medium doses.

Sixth. The harmlessness of his intra-uterine therapeutics is proved, first by the parallel harmlessness of the chemical or bloody methods of intra-uterine curetting, and especially by the figures collected throughout the world and by his own experience from July, 1882, to July, 1890, he has made 11,499 galvanic applications, divided as follows:—8,177 positive intra-uterine galvano cauterizations, 2,486 negative intra-uterine galvano cauterizations, 222 positive vaginal galvano punctures, 614 negative vaginal galvano punctures. He has treated 912 patients, composed of 581 fibroids, 133 simple endometritis, 248 cases of endometritis complicated with peri-uterine inflammation, which may be divided as follows: at the clinic—313 fibroids, 70 simple endometritis, 163 endometritis complicated with peri-uterine inflammation. At his office or in the city: 218 fibroids, 63 simple endometritis, 35 complicated endometritis. He has had three deaths due to operative mistakes (two galvano punctures, of which one was for a subperitoneal fibroid, and the other for salpingo ovaritis, and the third, a galvano cauterization of an ovarian cyst, which was mistaken for a fibroid.) He has seen thirty cases of pregnancy following the intra-uterine applications of galvanism.

#### A FURTHER COMMUNICATION ON A CURE FOR TUBERCULOSIS.\*

By Professor Robert Koch, M.D., of Berlin.

In an address delivered before the International Medical Congress I mentioned a remedy which conferred on the animals experimented upon an immunity against inoculation with the tubercle bacillus, and

\* Translated from the original article published in the *Deutsche medicinische Wochenschrift*, November 14th, 1890.

which arrested tuberculous disease. Investigations have now been carried out on human patients, and these form the subject of the following observations. It was originally my intention to complete the research, and especially to gain sufficient experience regarding the application of the remedy in practice, and its production on a large scale before publishing anything on the subject; but in spite of all precautions, so many accounts have reached the public, and in such an exaggerated and distorted form, that it seems imperative, in order to prevent false impressions, to give at once a review of the position of the subject at the present stage of the inquiry. It is true that this review can, under these circumstances, be only brief, and must leave open many important questions.

The investigations have been carried on under my direction by Dr. A. Libbertz and Stabsarzt Dr. E. Pfuhl, and are still in progress. Patients were placed at my disposal by Professor Brieger, from his polyclinic; Dr. W. Levy, from his private surgical clinic; Geheimrath Drs. Fantzel and Oberstabsarzt Kohler, from the Charite Hospital; and Geheimrath v. Bergmann, from the surgical clinic of the University. I wish to express my thanks to these gentlemen.

As regards the origin and the preparation of the remedy, I am unable to make any statement, as my research is not yet concluded. I reserve this for a future communication.\*

The remedy is a brownish, transparent liquid, which does not require special care to prevent decomposition. For use, this fluid must be more or less diluted, and the dilutions are liable to undergo decomposition if prepared with distilled water. As bacterial growths soon develop in them

they become turbid, and are then unfit for use. To prevent this, the diluted liquid must be sterilized by heat and preserved under a cotton-wool stopper, or, more conveniently, prepared with a one half per cent. solution of phenol.

It would seem, however, that the effect is weakened both by frequent heating and by mixture with phenol solution, and I have therefore always made use of a freshly-prepared solution. Introduced into the stomach the remedy has no effect. In order to obtain a reliable effect it must be injected subcutaneously, and for this purpose we have exclusively used the small syringe suggested by me for bacteriological work. It is furnished with a small India-rubber ball and has no piston. This syringe can easily be kept aseptic by the use of absolute alcohol, and to this we attribute the fact that not a single abscess has been observed in the course of more than a thousand subcutaneous injections.

The place chosen for the injection, after several trials of other places, was the skin of the back between the shoulder-blades and the lumbar region, because here the injection led to the least local reaction—generally none at all, and was almost painless. As regards the effect of the remedy on the human patient, it was clear from the beginning of the research that in one very important particular the human being reacts to the remedy differently from the animal generally used in experiments, namely, the guinea-pig. A new proof for the experimenter of the all-important law that experiment on animals is not conclusive for the human patient proved extraordinarily more sensitive than the guinea-pig. As regards the effect of the remedy, a healthy guinea-pig will bear a subcutaneous injection of 2 cubic centimetres, and even more, of the liquid without being sensibly affected; but in the case of a full-grown healthy man 0.25 cubic centimetre suffices to produce an intense effect. Calculated by the body-weight, one-fifteen-thousandth

\* Doctors wishing to make investigations with the remedy at present, can obtain it from Dr. A. Libbertz, Lueneburger Strasse, 28, Berlin, N. W., who has undertaken the preparation of the remedy with my own and Dr. Pfuhl's cooperation, but I must remark that the quantity prepared at present is but small, and that larger quantities will not be obtainable for some weeks.

part of the quantity which has no appreciable effect on the guinea-pig acts powerfully on the human being.

The symptoms arising from an injection of 0.25 cubic centimetre I have observed after an injection made in my own upper arm. They were briefly as follows: three to four hours after the injection there came on pain in the limbs, fatigue, inclination to cough, difficulty of breathing, which speedily increased in the fifth hour, and were unusually violent. A chill followed, which lasted almost an hour. At the same time there were nausea, vomiting, and a rise of body temperature to  $39.6^{\circ}\text{C}$ .

After twelve hours all these symptoms abated, the temperature fell, and on the next day it was normal. A feeling of fatigue and pain in the limbs continued for a few days, and for exactly the same period of time the site of injection remained slightly painful and red. The smallest quantity of the remedy which will affect the healthy human being is about 0.01 cubic centimetre, equal to 1 cubic centimetre of the one-hundredth dilution. As has been proved by numerous experiments, when this dose is used reaction in most people shows itself only by slight pains in the limbs and transient fatigue. A few showed a rise of temperature to about  $38^{\circ}\text{C}$ .

Although the effect of the remedy in equal doses is very different in animals and in human beings, if calculated by body weight, in some other respects, there is much similarity in the symptoms produced, the most important of these resemblances being the specific action of the remedy on the tuberculous process, the varieties of which I will not here describe. I will make no further reference to its effects on animals, but I will at once turn to its extraordinary action on tuberculosis in human beings. The healthy human being reacts either not at all, or scarcely at all, as we have seen, when 0.01 cubic centimetre is used. The same holds good with regard to patients suffering from diseases other than

tuberculosis, as repeated experiments have proved; but the case is very different when the disease is *tuberculosis*. A dose of 0.01 cubic centimetre injected subcutaneously into tuberculous patients causes a severe general reaction as well as a local one.

I gave children aged from two to six years one-tenth of this dose, that is to say, 0.001 cubic centimetre—very delicate children only 0.0005 cubic centimetre—and obtained powerful, but in no way dangerous, reaction. The general reaction consists in an attack of fever, which usually begins with rigors, and raises the temperature above  $39^{\circ}$ , often up to  $40^{\circ}$ , and even  $41^{\circ}\text{C}$ . This is accompanied by pain in the limbs, coughing, great fatigue, and often sickness and vomiting. In several cases a slight icteroid discoloration was observed, and occasionally an eruption like measles on the chest and neck. The attack usually begins four to five hours after the injection, and lasts from twelve to fifteen hours. Occasionally it begins later and then runs its course with less intensity.

The patients are very little affected by the attack, and as soon as it is over feel comparatively well, generally better than before. The local reaction can be best observed in cases in which the tuberculous affection is visible; for instance, in case of lupus, changes take place which show the specific anti-tuberculous action of the remedy to a most surprising degree. A few hours after an injection into the skin of the back—that is, in a spot far removed from the diseased area on the face or elsewhere—the lupus begins to swell and to redden, and this it does generally before the initial rigor. During the fever the swelling and redness increase, and may finally reach a high degree, so that the lupus-tissue becomes brownish and necrotic in places where the growth was sharply defined. We sometimes found a much swollen and brownish spot surrounded by a whitish edge almost one centimetre wide, which again was surrounded by a broad band of bright red.

After the subsidence of the fever the swelling of the lupus-tissue gradually decreases and disappears in about two or three days. The lupus-spots themselves are then covered by a soft deposit, which filters outward and dries in the air. The growth then changes to a crust, which falls off after two or three weeks, and which—sometimes after only one injection—leaves a clean, red cicatrix behind. Generally, however, several injections are required for the complete removal of the lupus-tissue; but of this, more later on. I must mention as a point of special importance that the changes described are exactly confined to the parts of the skin affected with lupus. Even the smallest nodules and those most deeply hidden in the lupus-tissue go through the process and become visible in consequence of the swelling and change of color, whilst the tissue itself in which the lupus-changes have entirely ceased remains unchanged. The observation of a lupus-case treated by the remedy is so instructive, and is necessarily so convincing, that those who wish to make a trial of the remedy should, if possible, begin with a case of lupus.

The specific action of the remedy in these cases is less striking, but is as perceptible to eye and touch as are the local reactions in cases of tuberculosis of the glands, bones, joints, etc. In these cases swelling, increased sensibility, and redness of the superficial parts are observed. The reaction of the internal organs, especially of the lungs, is not at once apparent, unless the increased cough and expectoration of consumptive patients after the first injections be considered as pointing to a local reaction in these cases. The general reaction is dominant; nevertheless, we are justified in assuming that here, too, changes take place similar to those seen in lupus-cases. The symptoms of reaction above described occurred, without exception, in all cases in which a tuberculous process was present in the organism after the use of 0.01 cubic centimetre, and I think I am justified in saying that the

remedy will, therefore, in the future, form an indispensable aid to diagnosis.

By its aid we shall be able to diagnose doubtful cases of phthisis; for instance, cases in which it is impossible to obtain certainty as to the nature of the disease by the discovery of bacilli or elastic fibres in the sputum or by physical examination. Affections of the glands, latent tuberculosis of bone, doubtful cases of tuberculosis of the skin, and similar cases will be easily and with certainty recognized. In cases of tuberculosis of the lungs or joints which have been apparently cured we shall be able to make sure whether the disease has really finished its course, and whether there be still some diseased spots from which it might again arise as a flame from a spark hidden by ashes.

Of greater importance, however, than its diagnostic use, is the therapeutic effect of the remedy. In the description of the changes which a subcutaneous injection of the remedy produces in portions of the skin affected by lupus, I mentioned that after the subsidence of the swelling and decrease of the redness the lupus-tissue does not return to its original condition, but that it is destroyed to a great or less extent and disappears. Observation shows that in some parts this result is brought about by the diseased tissue becoming necrotic, even after but one sufficiently large injection, and at a later stage it is thrown off as a dead mass. In other parts a disappearance or, as it were, a necrosis of the tissue, seems to occur, and in such case the injection must be repeated to complete the cure.

In what way this process of cure occurs cannot as yet be stated with certainty, as the necessary histological investigations are not complete; but this much is certain, that there is no question of a destruction of the tubercle bacilli in the tissues, but only that the tissue enclosing the tubercle bacilli is affected by the remedy. Beyond this there is, as is shown by the visible swelling and redness, considerable disturbance of the

circulation, and, evidently, in connection therewith, deeply-seated changes in its nutrition which cause the tissue to die more or less quickly and deeply, according to the extent of the action of the remedy. To recapitulate, the remedy does not kill the tubercle bacilli but the tuberculous tissue, and this gives us clearly and definitely the limit that bounds the action of the remedy.

It can influence living tuberculous tissue only and has no effect on dead tissue; as, for instance, necrotic cheesy masses, necrotic bones, etc., nor has it any effect on tissues made necrotic by the remedy itself. In such masses of dead tissue living tubercle bacilli may possibly still be present, and are either thrown off with the necrosed tissue, or may possibly enter the neighboring and still living tissue under certain circumstances of the therapeutic activity. If the remedy is to be rendered as fruitful as possible this peculiarity in its mode of action must be carefully observed. At first the living tuberculous tissue must be caused to undergo necrosis, and then everything must be done to remove the dead tissue as soon as possible, as, for instance, by surgical interference.

Where this is not possible, and where the organism is unassisted in throwing off the tissue slowly, the endangered living tissue must be protected from fresh incursions of the parasites by continuous applications of the remedy. The fact that the remedy makes tuberculous tissue necrotic and acts only on the living tissue, helps to explain another peculiar characteristic thereof, namely, that it can be given in rapidly increasing doses. At first sight, this phenomenon would seem to point to the establishment of tolerance, but since it is found that the dose can, in the course of about three weeks, be increased to five hundred times the original amount, tolerance can no longer be accepted as an explanation. As we know of nothing analogous to such a rapid and complete adaptation to an extremely active remedy, the phenomenon must

rather be explained in this way, that in the beginning of the treatment there is a good deal of tuberculous living tissue, and that consequently a small amount of the active principle suffices to cause a strong reaction, but by each injection a certain amount of the tissue capable of reacting disappears, and then larger doses are necessary to produce the same amount of reaction as before.

Within limits, a certain degree of habituation may be perceived as soon as the tuberculous patient has been treated with increasing doses, for so soon as the point is reached at which reaction is as feeble as that of a non-tuberculous patient, then it may be assumed that all tuberculous tissue is destroyed. Then the treatment will only have to be continued by slowly-increasing doses and with interruption in order that the patient may be protected from fresh infections while bacilli are still present in the organism, and whether this conception and the inference that follows from it be correct, the future must show. They were conclusive, as far as I am concerned, in determining the mode of treatment by the remedy which in our investigations was practised in the following manner. To begin with the simplest case—lupus.

In nearly every one of these cases I injected the full dose of 0.01 cubic centimetre from the first. I then allowed the reaction to come to an end, and then, after a week or two, again injected 0.01 cubic centimetre, continuing in the same way until the reaction became weaker and weaker, and then ceased. In two cases of facial lupus the lupus-spots were thus brought to complete cicatrization by three or four injections; the other lupus-cases improved in proportion to the duration of treatment.

All these patients had been sufferers for many years, having been previously treated unsuccessfully by various therapeutic methods. Glandular, bone, and joint tuberculosis was similarly treated, large doses at long intervals being made use of. The result was the same as in the lupus-cases—

namely, a speedy cure in recent and slight cases, slow improvement in severe cases.

The circumstances were somewhat different in phthisical patients, who constituted the largest number of our patients. Patients with decided pulmonary tuberculosis are much more sensitive to the remedy than those with surgical tuberculous affections.

We were obliged to diminish the dose for the phthisical patients, and found that they almost all reacted strongly to 0.002 cubic centimetre, and even to 0.001 cubic centimetre. From this first small dose it was possible to rise more or less quickly to the amount that is well borne by other patients. Our course was generally as follows: an injection of 0.001 cubic centimetre was first given to the phthisical patient, and from this a rise of temperature followed, the same dose being repeated once a day until no reaction could be observed. We then increased the dose to 0.002 cubic centimetre, until this was borne without reaction, and so on, increasing by 0.001, or at most 0.002 to 0.005 cubic centimetre.

This mild course seemed to be imperative in cases in which there was great debility. By this mode of treatment the patient can be brought to tolerate large doses of the remedy with scarcely a rise of temperature. But patients of greater strength were treated from the first partly with larger doses and partly with frequently repeated doses. Here it seemed that the beneficial results were more quickly obtained. The action of the remedy in cases of phthisis generally showed itself as follows: Cough and expectoration were generally increased a little after the first injection, then grew less and less, and in the most favorable cases entirely disappeared. The expectoration also lost its purulent character and became mucous. As a rule, the number of bacilli decreased only when the expectoration began to present a mucous appearance. They then entirely disappeared, but were again observed occasionally until expectoration completely ceased. Simultaneously the

night-sweats ceased, the patients' appearance improved, and they increased in weight within from four to six weeks.

Patients under treatment for the first stage of phthisis were freed from every symptom of disease and might be pronounced cured; patients with cavities not yet too highly developed improved considerably and were almost cured, and only in those whose lungs contained many large cavities could no improvement be proved. Objectively, even in these cases the expectoration decreased and the subjective condition improved. These experiences lead me to suppose that phthisis in the beginning can be cured with certainty by this remedy. This statement requires limitation in so far as at present no conclusive experiences can possibly be brought forward to prove whether the cure is lasting.

Relapses naturally may occur, but it can be assumed that they may be cured as easily and quickly as the first attack. On the other hand, it seems possible that, as in other infectious diseases, patients once cured may retain their immunity; but this, too, for the present, must remain an open question. In part, this may be assumed for other cases, when not too far advanced; but patients with large cavities, who suffer from complications caused, for instance, by the incursion of other pus-forming microorganisms into the cavities or by incurable pathological changes in other organs will probably obtain lasting benefit from the remedy in only exceptional cases. Even such patients, however, were benefited for a time. This seems to prove that in their cases, too, the original tuberculous disease is influenced by the remedy in the same manner as in the other cases, but that we are unable to remove the necrotic masses of tissue with the secondary suppurative process.

The thought involuntarily suggests itself that relief might possibly be brought to many of these severely-afflicted patients by a combination of this new therapeutic method with surgical operations (such as the opera-

tion for empyema), or with other curative methods, and here I would earnestly warn people against conventional and indiscriminate application of the remedy in all cases of tuberculosis. The treatment will probably be quite simple in cases in which the beginning of phthisis and simple surgical cases are concerned, but in all other forms of tuberculosis medical art must have full sway by careful individualization and making use of all other auxiliary methods to assist the action of the remedy.

In many cases the decided impression was created that the careful nursing bestowed on the patient had a considerable influence on the result of the treatment, and I am in favor of applying the remedy in proper sanatoria as opposed to treatment at home and in the out-patient room. How far the methods of treatment already recognized as curative, such as mountain climate, fresh-air treatment, special diet, etc., may be profitably combined with the new treatment cannot yet be definitely stated, but I believe that these therapeutic methods will also be highly advantageous when combined with the new treatment. In many cases, especially in the convalescent stage, as regards tuberculosis of the brain and larynx and miliary tuberculosis, we had too little material at our disposal to gain proper experience.

The most important point to be observed in the new treatment is its early application. The proper subjects for treatment are patients in the initial stage of phthisis, for in them the curative action can be most fully shown, and for this reason, too, it cannot be too seriously pointed out that practitioners must in the future be more than ever alive to the importance of diagnosing phthisis in as early a stage as possible. Up to the present time the proof of tubercle bacilli in the sputum was considered more as an interesting point of secondary importance, which, though it made diagnosis more certain could not help the patient in any

way, and which, in consequence, was often neglected.

This I have lately repeatedly had occasion to observe in numerous cases of phthisis, which had generally gone through the hands of several doctors without any examination of the sputum having been made. In the future this must be changed. A doctor who shall neglect to diagnose phthisis in its earliest stage by all methods at his command, especially by examining the sputum, will be guilty of the most serious neglect of his patient, whose life may depend upon the early application of the specific treatment. In consequence, in doubtful cases, medical practitioners must make sure of the presence or absence of tuberculosis, and then only will the new therapeutic method become a blessing to suffering humanity, when all cases of tuberculosis are treated in their earliest stage, and we no longer meet with neglected serious cases forming an inextinguishable source of fresh infections. Finally, I would remark, that I have purposely omitted statistical accounts and descriptions of individual cases, because the medical men who furnished us with patients for our investigations have themselves decided to publish the description of their cases, and I wished my account to be as objective as possible, leaving to them all that is purely personal.—*Medical News*.

#### TREATMENT OF COLD ABSCESS AND OF TUBERCULOUS ABSCESS ABOUT JOINTS.

Dr. Barns injects iodoform in solution of olive oil in preference to ether or glycerine. He believes this treatment to be beneficial beyond doubt, having cured ten cases of spinal abscess, some of them containing from 1 to 2 litres of pus. Treatment takes from 8 weeks to 4 months before the cavity contracts. Some of his cases have been under observation for 4 years, without return of the disease. He believes that the iodoform causes the bacilli in the walls of the abscess to disappear and thus checks the cell proliferation, allowing a fibrous contraction.—*Annals d'Orthopédie*



## Society Proceedings

### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

*First Regular Meeting on Friday, October 3rd.*

DR. FRANCIS J. SHEPHERD, PRESIDENT, IN THE CHAIR.

Present:—Drs. Molson, Proudfoot, Alloway, Wesley Mills, Harry Bell, James Bell, Hutcheson (Cote St. Antoine), George Brown, Reed, DeCow, Blackader, A. D. MacDonald, McCarthy, Schmidt, Birkett, Jack, Hamilton, Smith, Armstrong, Evans, England, Laphorn Smith, James Stewart, J. A. McDonald, Rodger, W. Gardner, Roddick, Ruttan, Alex. Gardner, Wyatt Johnson.

Dr. Johnson exhibited a well marked specimen of carcinoma of the stomach, with specimens also of the liver which was infiltrated with the disease. The man had been addicted to drink for many years. Dr. Molson gave a history of the case from the time he came under his care until his death. He said that the case had not been diagnosed during life. The symptoms were loss of appetite, weakness, which had lasted for nine months. About four months ago he began vomiting after eating, and the vomiting relieved the pain. There was no dilatation of the stomach. Towards the last, the cachectic appearance became marked. When he came to the hospital, the most pronounced symptom was diarrhoea, for which he was treated with aromatic sulphuric acid and opium, which only relieved it for the time. Bi-carbonate of soda was then tried, which was also ineffectual. The vomiting was entirely relieved by small doses of cocaine.

Epithelioma of the tongue was then exhibited by Dr. Bell, who had removed it from a man 64 years of age, who had been sent into the hospital from the country by Dr. MacDonald, who said that the man had been ill for nine months, but the patient himself thought his illness only dated a few weeks back. It was in a horrible condition, probably owing to his having been in the hands of quacks who had possibly employed caustics. The tongue was removed as far as its base, on the 22nd of August, by Symes' method, which consists in sawing through the symphysis of the jaw and removing the whole floor of the mouth and the glands lying therein. A drainage tube was inserted. No food was given by the mouth, being fed by enema. After that he tried to swallow, but was unable to do so, and he was therefore fed by stomach tube. For five weeks after the operation he seemed very well, his only complaint being that he was always hungry. After that, he began to get weak. 48

days after the operation he died. At the *post mortem*, one of the lungs was found to be gangrenous at its apex. Dr. Bell was unable to say what was the cause of his death, and the gangrene of the lung, if it had happened immediately after the operation, he would have put it down to the inspiration of discharges, but as it had only come on after handing over the feeding to the charge of the nurses or under nurses, he thought it was due to allowing the food to get into the bronchial tubes. Dr. Mills thought it worth while to inquire whether the gangrene was not rather due to some injury of the pneumogastric nerve, which is known to be a common factor of gangrene of the lungs. Dr. Johnson thought the man died of septicæmia, and that he was in a more septic condition than his appearance led his attendants to suspect. Dr. Shepherd thought that this operation was the most successful he had ever seen, and was surprised to hear that the patient had died. He was much pleased with the operation, and was astonished to find how easily hemorrhage was controlled by picking up the arteries as they were cut. He was in the habit of employing another method, namely, tying the lingual arteries, and then removing the tongue. He mentioned a case of his own in which a man had died with gangrene of the lung after removal of the tongue, but he thought it was due to erysipelas which had developed.

Dr. Bell also related a case of, and showed specimens from a man who had a stricture of the urethra which had been relieved many times by dilatation. After a time he had neglected it and began to have pus in his urine and febrile symptoms. Thinking it possible he might have stone in the kidneys, Dr. Bell cut down upon it, and explored it, but could find nothing. He died a week later, and at the *post mortem* the source of the pus was found to be an abscess in the wall of the bladder.

Dr. Shepherd related a similar case of a man upon whom he had performed rapid dilatation, and who had returned a month later in a septic condition. As he was in a very bad state, he decided to leave him alone, and he died in two weeks.

Dr. Johnson then showed specimen of fibroid heart.

Dr. W. Gardner then showed a specimen and read a report on a case of ruptured tubal foetation, in which he had successfully removed the ruptured tube. Dr. Gurd had sent for him two weeks ago to see a lady 26 years of age, more than eight years married, with three living children at full time, the last of which was two and a half years of age, in whom Dr. Gurd believed there was extra-uterine foetation. She last menstruated on June 20th. She felt sure that she was pregnant, because she was in the habit of vomiting every day during the first month, which she did in this case. Two weeks

ago while driving over a rough road, she was taken with sudden pain and vomiting and fainted. She recovered from this, but a few days later was taken with another attack. On examining her, a large mass was found completely filling up the pelvis and pushing the uterus forward against the symphysis pubis. There was also constant but slight bleeding from the uterus. He saw her a week later when the mass was considerably increased; so an operation having been decided upon, the abdomen was opened, and the omentum was found adhered to the parietes. The large mass was found to consist of blood clot, when the left tube was discovered very much enlarged and ruptured. Although there was a distinct chorion there was no fetus which he expected to find. This was, however, probably absorbed. He also showed specimen of a complete cast of the uterus, which was a decidua vera which came from a lady who had missed two periods, and who, while out walking, was seized with pain and vomiting, exactly the same as in the previous case. On examination a mass was found which was probably an extra-uterine foetation, which will probably require operation.

Dr. Johnson exhibited microscopic sections of the chorion

Dr. L. Smith congratulated Dr. Gurd upon having made the diagnosis, and Dr. Gardner upon so promptly taking action and saving this patient's life. He thought it wonderful to think that this condition had been recognized and remedied, when so many women have died without even the cause of their death being known. He would like to see this case reported and brought to the notice of every practitioner throughout the country, so that they might have such a possibility in their mind, which was a great step towards recognizing it. This was proved by the fact that when this case was diagnosed it was by doctors in cities who had opportunities of hearing about them. He had no doubt that many women die every year from rupture of a tube without the cause of death ever being suspected. For his work on this subject alone, Lawson Tait had earned the gratitude of the profession and humanity.

Dr. Molson showed a patient with ankylosis of the spine and read a history of the case. Dr. Roddick and Dr. Rodger, who knew something of the circumstances of the patient, he having been in the penitentiary, thought it was a case of malingering. Dr. Smith thought as the man had had rheumatism, that it might really be a case of chronic rheumatic arthritis of the vertebral joints. Dr. G. Brown had seen a case of ankylosis of all the joints, following rheumatism. Dr. Shepherd thought it strange that only the vertebral articulations should be affected. Dr. Birkett drew attention to the point that the muscles of the back were fairly

well developed instead of being atrophied, as they would be if never used.

Dr. Armstrong, the retiring president, then read the annual address, in which he called attention to the large amount and high character of the work done during the past year. There had been nineteen meetings held, at which the average attendance was  $26\frac{1}{2}$ ; the largest attendance being 42 out of a total membership of 94. There were four new members elected as against four new members last year. There had been no deaths in the ranks. He then classified the papers and pathological specimens under headings of surgery, medicine, gynecology, &c., giving each of the readers of papers, and exhibitors of specimens credit for their work. The financial condition was good, and steps have been taken to make the rooms still more attractive.

A vote of thanks was proposed by Drs. Roddick and Rodger.

After the proposition of Dr. F. E. Thomson for membership, the meeting adjourned.

#### *Stated Meeting, October 24th, 1890.*

F. J. SHEPHERD, M. D., PRESIDENT, IN THE CHAIR.

*Diffuse Cancer of the Stomach.*—Dr. Johnston, who exhibited this specimen, made the following remarks:—

"The stomach is extremely small, its length from fundus to pylorus being only four inches. The wall is greatly thickened, measuring five-eighths of an inch in most places. It is firm and hard, with somewhat translucent appearance on section. All its coats are greatly thickened, and the stomach is converted into a narrow tube with firm, inelastic walls which do not collapse. Internally, an ulcer is seen just below the orifice of the oesophagus; its edges are slightly raised. A few other small superficial ulcers are seen along the greater curvature. Pyloric ring firm and rigid; admits the little finger. About the stomach firm fibrous adhesions exist binding it to the omentum, and there is some fibrous thickening between the stomach and pancreas. There is a single, small, firm, white nodule, size of a pea, in the upper surface of the right lobe of the liver. There is no enlargement of the epigastric or portal glands. The microscope shows great proliferation of the deeper cells of the mucosa. The muscular coat is uniformly infiltrated with solid masses of small epithelial cells, which fill all the lymph vessels between the muscle bundles. Many of these cells have undergone colloid change. The nodule in the liver has the typical appearance of a scirrhus, the cells being very scanty. This form occurs in about ten per cent. of all cases of gastric cancer. Many of the cases described as gastric cirrhosis are really cancerous."

Dr. Molson stated that the patient, a woman 58 years of age, had been admitted to the hospital in June last, complaining of weakness and loss of appetite. Her illness had commenced four months previously, with vomiting and pain in the epigastrium. There was considerable emaciation and a somewhat cathectic appearance. The abdominal parietes were lax and shrunken. There was no tenderness nor distention of stomach, and no tumor could be felt. Patient became comatose, and died three and a half months from the date of her admission.

*Epithelioma of the Tongue.*—(From a case operated on by Dr. Bell.)—Dr. Johnston, who showed the specimen, said: The specimen shows the condition after complete amputation of the tongue. The stump is seen just in front of the epiglottis; it presents a number of small follicular ulcers, and a small sinus exists where a ligature has remained; but there is no return of the growth or deep ulceration. On the floor of the mouth another small ligature is seen. There is no appearance of secondary cancer in the neighboring parts. The inferior maxilla, which had been sawn through at the time of the operation, had not united, and each end was covered by granulations. There was gangrene of the lungs: a large cavity occupied nearly the entire left upper lobe posteriorly; it was lined with a firm, well-marked granulation membrane in most places. A smaller cavity, the size of an apple, was found in the same lobe. A number of small areas of pneumonia were found throughout both lungs, and in several of these the vessels were found thrombosed and the centres gangrenous. Nothing was found to explain this condition. The bronchial tubes were free from foreign bodies. No cancerous thrombi were found in the vessels.

From the same patient the heart was exhibited. This showed a decided dilatation and hypertrophy of the left auricle; marked thickening in one of the segments of the mitral valve apparently producing moderate stenosis when the valves were in position, though, after opening, the circumference of the orifice was normal. At the apex there was a large fibrous area in the heart-wall involving the papillary muscles. The larger coronary arteries were very atheromatous, their walls thickened and calcified. There was slight atheroma of the aorta. The wall of the left ventricle was thick; the muscle somewhat brown. The lungs were free from brown pigmentation or dilatation of the capillaries.

Dr. Jas. Bell narrated the history of this case. The patient was a man, aged 64, who presented very extensive infiltration and ulceration of the anterior half of the tongue and the floor of the mouth. History of two months standing, but from other and more reliable sources it was found that the trouble had existed

seven months, and that the patient had been treated with caustic applications. In the operation performed upon this patient, Dr. Bell had selected Syme's method of sawing through the inferior maxilla at its symphysis. The tongue and floor of the mouth were removed, and, besides, some glands which were infiltrated. The opposite sides of the bone were then brought together with strong silk, and the incision in the lower lip sutured with catgut. The patient was fed by nutrient enemata for forty-eight hours following the operation, when milk was introduced into the stomach by the œsophageal tube. On the fifth day, beef tea and eggs were added; but owing to the patient's inability to swallow, the tube had to be used whenever food was administered. He had not a bad symptom, and did remarkably well for four weeks; he then began to grow weak and cough occasionally. Signs of disease in the lungs were now manifest at the apices, both in front and behind. The patient gradually got worst and died on the forty-eighth day after the operation. Dr. Bell thought that the origin of the gangrene of the lungs might be ascribed to the entrance of food into the air-passages, either from the ineffectual efforts to make the patient swallow or else when using the œsophageal tube which had been entrusted to the nurse.

Dr. Shepherd was present at the operation. He generally performed excision of the tongue after ligature of both linguals, but remarked that Syme's method, adopted by Dr. Bell in this case, proved very successful. By the division of the lower jaw the whole of the diseased part was removed with great facility. As to the cause of the gangrene of the lungs, he could not say whether it were due to the insufflation of food or not. A patient from whom he had excised the tongue developed gangrene of the lungs three weeks after the operation, but in this case there was erysipelas.

Dr. Mills, in referring to the probable cause of the gangrene of the lungs, remarked that after experimental operation in the lower animals, in which the vagi nerves had been cut, the animals died of pneumonia produced by insufflation of food. He suggested that the inflammation might be of purely nervous origin, and put forward the view of the possibility of its being produced by some degeneration of the fibres of the vagus.

*Suppurative Pyelo-Nephritis.*—Dr. Shepherd related the following case:—A man, aged 33, of intemperate habits, had gonorrhœa fourteen years ago, and shortly afterwards had difficulty in micturition, the stream gradually diminishing in size; he had suppression of urine in 1878, and had to be aspirated. He felt better for a year, when, owing to his intemperate habits, he again experienced difficulty in micturition, and from 1882 to 1884 he was unable to fully empty his bladder. External

urethrotomy was performed in Glasgow in 1886, and for two years following he was free from the complaint. He applied to the out-door department of the General Hospital on the 28th of June, suffering from retention. It being impossible to pass a catheter, he was aspirated above the pubes. Dr. Shepherd afterwards succeeded in passing a small catgut bougie and then introduced sounds to number 7. Three days later sounds up to number 12 were passed. Patient afterwards felt better and was able to pass his urine quite freely, and left the hospital on July 4th. Three weeks afterwards he was re-admitted, complaining of frequency of micturition and pain in the right lumbar region, with passage of blood. The severity of the pain over the right kidney increased, extending along the course of the ureter and into the right testicle. The urine, which varied from 48 to 80 ounces in the twenty-four hours, was of a dark-brownish color, containing a considerable amount of pus and blood cells. The patient gradually sank, and died August 12th. Temperature never reached above 102°, and for six days previous to his death was subnormal.

Dr. Johnston, who exhibited the specimen, remarked that it showed a stricture just anterior to the bulbous urethra. There was no induration in the wall of the urethra. The kidneys showed slight dilatation of the pelves and calices. About the right kidney there was a large mass of dense fibrous tissue closely adherent to the capsule.

*Ruptured Tubal Pregnancy.*—Dr. Wm. Gardner showed this specimen from a case in which he had opened the abdomen a week previously. Dr. Gurd, in whose practice the case occurred, had correctly diagnosed the condition. The patient, aged 26, married eight years, the mother of three full-grown children, the last over two years. Since then she had pelvic symptoms. She menstruated last on 20th June, and began to vomit a few days later, as in all her previous pregnancies, and was convinced that she was again pregnant. This continued until the 21st of September, when, during a rough drive, she was suddenly seized with intense abdominal pain accompanied by vomiting and a bloody discharge from the vagina. On getting home she fainted. The pain was relieved in a few hours by full doses of morphia, and she got up in a day or two; but soon had recurrence of pain of the same character and intensity, which compelled her to lie in bed on her back. She was first seen by Dr. Gardner a week before operation; she looked blanched and anxious. The abdomen was somewhat distended in lower part by a fixed, tender mass. The uterus lay behind the pubes, pressed forward by a tender, elastic mass, fixing the roof of the vagina and filling the pelvis. A week later the symptoms and physical signs had all increased. She was operated upon on the 17th of October. On getting through the

adherent omentum a mass of blood-clot was disclosed; this was scraped out and found to contain some decolorized blood. The right Fallopian tube was expanded to a mass of the size of a large hen's egg. This was tied and removed, the cavity washed out, and a large glass drainage tube carried to the floor of Douglas pouch. When put to bed, patient was very weak, with a pulse of 160, but rallied promptly, and is making an easy recovery.

Dr. Johnston, who had examined the specimen, submitted the following report: The specimen is about the size of an egg, and consists chiefly of firm, elastic, fibrinous material, which resembles partially decolorized and organizing blood-clot. It seems to contain numerous vessels. On placing it in water, a delicate fringe of minute villi covers nearly its whole surface. These show, under the microscope, the branched and clubbed appearance characteristic of chorionic villi. At one point a thick, flat, muscular band is attached to the mass, and appears to be part of the greatly thickened and dilated Fallopian tube. On section the inner surface appears to be for the most part a mixture of old and recent blood-clot and vascular tissue. Situated near the surface, at the end farthest from the attached bit of Fallopian tube, is a flattened cystic space the size of a pigeon's egg, lined with a delicate greyish-white, smooth membrane, evidently the amnion. At one point on this small, flattened projection is seen, apparently, the remains of the umbilical cord. No traces of the foetus could be seen.

Dr. Gurd wished to remark that the patient had suffered from uncontrollable vomiting in her previous pregnancies, and in the present instance the vomiting had been very severe up to the time of the operation.

Dr. Laphorn Smith congratulated Drs. Gardner and Gurd on the successful issue of this case. He said that in some of these cases of ruptured extra-uterine pregnancy the foetus had been found in very unusual situations in the abdominal cavity.

*Decidual Membrane.*—Dr. Wm. Gardner exhibited a very interesting specimen of the decidual membrane which formed a perfect and complete cast of the cavity of the uterus. The patient had borne one child. She was comparatively well up to last week, when she was suddenly seized with vomiting and fainting. On examination, Dr. Gardner found physical signs somewhat similar to the case above mentioned. A week later the patient was seized with severe pain and the membrane expelled. He believed it to be without doubt a case of ectopic gestation. The patient was still under observation.

*Anchylosis of the Spine.*—Dr. Molson brought before the Society a man, aged 30, apparently the subject of anchylosis of the spine. This was said to have begun suddenly three years ago, with pain in the back of the

neck. The patient had had rheumatism eight years ago. There was no history of venereal disease, and nothing in the family history. On examination, the patient appeared fairly well nourished. There seemed to be some tenderness over the dorsal region. In all movements the spine appeared apparently fixed, but rotation and nodding movements of the head were retained to some extent.

Dr. Roddick believed the case to be one of malingering; as there was nothing in the personal history to produce such extreme ankylosis. He believed that under an anæsthetic motion would reappear in the now apparently rigid spine.

Dr. Rodger agreed with Dr. Roddick, and considered these symptoms to be feigned.

Dr. G. A. Brown had met with a case in hospital with ankylosis of spine, knee and hip joints. The patient had been the subject of gonorrhœal rheumatism.

Dr. James Bell thought that the case was one of real ankylosis, but would like to have a closer examination of the case.

Dr. Mills had noticed cases of spinal ankylosis in the lower animals.

Dr. DeCow would suggest the use of the actual cautery as a means to the diagnosis in this case.

Dr. Molson stated that the patient had been under close observation, but that he had never betrayed any signs of movement of the spine.

Dr. Birkett found the muscles too well developed for a patient the subject of a general ankylosis of long standing.

Dr. Shepherd had examined the patient; he found no caries; muscles were in state of tension. He thought it was a case of malingering; the idea of which possibly originated in some slight rheumatic affection. He had seen cases of rheumatoid arthritis in which all the joints were involved. He noticed that there was movement of the axis and atlas, which seemed peculiar, considering that all the rest of the spine appeared ankylosed.

#### THE PRESIDENT'S ADDRESS.

Dr. G. E. Armstrong, the retiring president, then read the following address:—

*Mr. President and Gentlemen*,—In following a time-honored custom of reviewing the work done by our Society during the past year, I wish to take the opportunity of thanking one and all for the courtesy shown to the chair during that period, and for the promptness with which you have come forward with pathological specimens, papers, and cases in practice. I have tried to do my best to make the meetings interesting and instructive, and I only hope that none are more conscious than the speaker of my shortcomings. The past year has been one of the Society's best. We have had 19 meetings

as compared with 16 the year before, and the average attendance has also increased, being 26.1—25.5 being the average for the year before. The largest number at any one meeting was 12, and the smallest number 17. During the year 1888-89 four new members joined the Society, and during the year 1889-90 eleven new members joined. Our total membership at the beginning of the year was 83, and at the close of the year 91. Death has not entered to claim any of our number during the year.

In looking over the work done during the year, its varied character is quite noticeable: subjects interesting to general practitioners and specialists also being taken up and discussed at nearly every meeting.

*Medicine*.—In medicine, Dr. Hutchinson related an interesting case in which delirium followed acute pneumonia, and of hysteria occurring during the course of rheumatism, presenting considerable difficulty in diagnosis. We had an interesting paper from Dr. McCarthy on the distribution of lesions in chronic phthisis. Dr. R. L. MacDonnell brought before the Society the results of his experience in one hundred cases of typhoid fever, of which he had carefully kept notes. This paper excited a very interesting discussion on many of the points worked out. Dr. MacDonnell also showed to the Society a case of Hodgkin's disease. Dr. Campbell, a case of pneumonia, in which symptoms were entirely objective. A paper on aneurysm of the arch of the aorta was read by Dr. MacDonnell and Dr. Major together. Dr. Major read an interesting paper on the use of hydrogen peroxide in diphtheria, speaking favorably of its action. At the same meeting Dr. Major read notes of two cases of deflection of nasal septum and their treatment.

*Surgery*.—In surgery, a paper on a case of appendicitis by Drs. Shepherd and MacDonnell, in which an operation saved the patient's life. Dr. Praeger of Nanaimo sent a paper on cholecystectomy, which was read by Dr. Shepherd. Dr. Bell exhibited a case of multiple fibroma of skin, and naevus with sarcoma of popliteal space. Dr. Roddick, an interesting case of fragilitas ossium and an interesting review of the subject. Dr. Bell, a case of talipes equino-varus, upon which he had operated with good result; also two cases, one of genu valgum and one of genu varus, after operation, in which the result was very satisfactory, photographs of their condition before operation being also shown.

*Midwifery*.—In midwifery Dr. G. T. Ross presented a paper on missed abortion, which gave rise to a good deal of discussion. And a paper of more than ordinary interest from Drs. Cameron and Gardner on a case of labor obstructed by a large fibroid.

*Neurology*.—In neurology, Dr. Blackader read a paper on Friedrich's ataxia, of much interest, and Dr. Stewart exhibited a case of

heimatrophly of the tongue, with left-sided facial paralysis and polyuria.

*Skin Diseases.*—Dr. Foley submitted a paper on the influence of clothing on diseases of the skin.

*Therapeutics.*—Dr. Stewart, a paper detailing his experience in the use of exalgine in a large number of cases.

*Gynaecology.*—In gynaecology, Dr. Trenholme read a paper on hysterectomy for fibroid tumor of the uterus, relating nine cases which he had operated upon; and Dr. Gardner a paper on abdominal section in tubercular disease of peritoneum and uterine appendages, relating several cases of unusual interest. Dr. Alloway presented a paper upon twenty cases of Alexander's operation for retroversion, speaking favorably of the results obtained. Dr. Smith read a paper on five cases of laparotomy, drawing attention to several practical points connected with the details of the operation.

*Ophthalmology.*—Dr. Buller presented a patient from whom he had removed a tumor of the orbit which had surrounded the optic nerve.

I regret that the younger members of the Society have not taken a greater part in the discussion of these papers, and I think that they, as well as the Society, are the losers. One cannot begin to young to learn to express one's thoughts clearly and concisely. It would add much to the interest of our meetings if the younger members of the profession would come forward and take an active part in the Society's work.

One of the most interesting and instructive sections of our work is the pathological, and it is a matter of mutual congratulation that there has been at nearly every meeting such an abundant supply of pathological specimens, abundant in quantity and variety. The Society is especially, and very greatly, indebted to Dr. Johnston for the attention that he has given to this department of our work, and for the able and clear demonstration of the specimens that have been exhibited. Among others we have had before us for examination a great number of fibroid growths, each one accompanied by a complete history. Dr. Gardner has shown several uterine fibroids successfully removed by him, also a fibro-cyst of uterus, an interstitial fibro-myoma of uterus, a myo-sarcoma of uterus, as well as a small multilocular cyst of ovary and a cyst of the broad ligaments not involving the ovary, also a papilloma of ovary and specimen of extra-uterine foetation with history. Dr. Shepherd, a fibro-cyst of ovary, which presented considerable difficulties in its removal, followed, fortunately, by a happy result. Dr. Trenholme, a parovarian retro-peritoneal cyst. Dr. Smith showed a fibro-cyst of uterus. Dr. Alloway, a large cystoma weighing 40 lbs., a blood cyst of ovary and a pyosalpinx, also a specimen of epithelioma of cervix. Another blood cyst of

ovary was shown by Dr. Armstrong. A number of vesical calculi have been exhibited. One by Dr. Bell, removed from a patient the subject of diabetes mellitus; a large vesical calculus weighing over five ounces, by Dr. Hingston, which he had removed by lateral lithotomy; one of pure cystine, removed by Dr. Roddick; and one by Dr. Gurd. A large gall-stone, which had given rise to symptoms of intestinal obstruction, was shown by Dr. Bell. Dr. Mills exhibited a triple phosphate calculus removed from urethra of a dog. Dr. Major showed to the Society a fine specimen of rhinolith which he had removed. Dr. Hutchinson, a piece of egg-shell with an interesting history, tending to show that it had passed through the larynx of a young child, remaining in a bronchus for a few days, when it was coughed up. Dr. Johnston showed for Dr. Brown a tympanum, in which the roof had been perforated by chronic suppurative otitis media. Dr. Buller exhibited a tumor removed from the orbit which had been perforated by the optic nerve. Dr. Foley showed specimens from a case of trichorexis nodosa. Dr. Mills exhibited a very interesting instance of hermaphroditism in a pig. An example of necrosis of femur was shown by Dr. Hingston. A perforated appendix with faecal concretion, removed by Dr. Shepherd, was shown and history given; another perforated appendix with faecal concretion by Dr. Armstrong. Dr. Johnston showed two cases of elephantiasis of breast, one of them was sent by Dr. Gooding of Barbadoes. Dr. R. L. MacDonnell, an example of aneurism of descending aorta. A specimen of aneurism of thoracic aorta was shown by Dr. Johnston. Dr. Johnson also showed a specimen of embolism of abdominal aorta, as well as a specimen of thrombosis of left ventricle of heart, and another specimen of ruptured heart was shown by Dr. Johnston, and one of myocarditis by Dr. Hutchinson. Dr. Roddick exhibited tuberculous glands of neck; he removed thirty of these from one patient. Dr. Bell showed the urinary organs from a patient upon whom he had performed internal urethrotomy, the patient subsequently dying of tuberculous disease of the kidneys, also an example of sarcoma of foot, which Dr. Bell removed by a Syme. Dr. Springle showed the photograph of a child in whom there existed left-sided facial paralysis and hemiatrophy of the tongue, thought to be due to injury inflicted by forceps during delivery. Two stomachs perforated by ulcers were shown, one by Dr. DeCew and one by Dr. Armstrong. In addition, Dr. Johnston exhibited, among many others, intra-capsular fracture of femur, fracture of left os. innominatum through acetabulum, with dislocation at sacro-illiac synchondrosis and dislocation at symphysis pubis, fatty heart, a heart infiltrated with adipose tissue, a case of intestinal obstruction in a child, of laceration of urethra, gunshot wound

of brain, lymphatic cystoma of broad ligament. Dr. Gurd presented a specimen of missed abortion, which was referred to a special committee for examination and report. Dr. England showed a retained abortion with a very complete history, which showed that it had been retained six months after probable time of death. Dr. Shepherd showed a kidney, removed post mortem, containing a calculus; five years before Dr. Shepherd had removed the other kidney for the same condition.

In conclusion, I may add that the financial condition of the Society is good, and that arrangements are completed to render our assembly room more inviting by adding a carpet, and a reading-room will be comfortably furnished where members may at any time spend an hour consulting the journals which the Society provides.

The growth of the Society, as shown not only by an increase in number of members, but the growth of individual interest, as shown by the increased average of attendance and the variety of subjects introduced for discussion, and the what to some has seemed at times to be an overstock of material, gave rise during the year to the question of the advisability of rearranging the order of work or of meeting oftener than once a fortnight.

In looking over the work done by the Society during the year, I think it will strike most of you that almost as much time has been given to pathology as to all other work together, and I think I voice the unanimous feeling of the members when I say that we don't want any less pathology. It is interesting and instructive, and, I believe, has done a very great deal to elevate the English portion of the profession in Montreal and the character of the work they do. It has made them better readers, better thinkers, and better observers. But perhaps I may be allowed to suggest that if the work becomes too great, and a subdivision is necessary, that it be made on a line that will divide the work only and not the members. If pathology, for example, was allowed to occupy the whole of one evening every member would attend, and alternate evenings could be devoted to the reading of papers, the relating of cases, and the discussion of them. I believe it to be to the advantage of all that the senior and junior members meet together and work together. And that the specialists and pseudo-specialists and general practitioner meet together, that in their work they may be in touch and harmony.

I thank you once more for the high honor you conferred upon me in electing me a year ago your chairman, and wish you, Mr. President, great pleasure and success during your term of office.

*Regular Meeting, Friday, 7th November.*

Dr. FRANK SHEPHERD, PRESIDENT, IN THE CHAIR.

Present:—Doctors Reed, Reddy, England Hutchison (Point St. Charles) John Gardner, Vidal, Harry Bell, Kinloch, Allan, Richard MacDonald, James Stewart, Wyatt Johnson, McCarthy, Edward Blackader, Jack, Alloway, Molson, J. A. MacDonald, Leslie Foley, Williams, Alice Gardner, McGannon (Brockville), Whyte, Springle, Feller, O'Connor, Inksetter, F. W. Campbell, and Laphorn Smith.

Dr. Lefebvre of Vancouver was introduced as a visitor, and invited to take a seat beside the president.

Dr. J. M. Elder of Cote St. Antoine was then proposed by Dr. Gardner, seconded by Dr. Hutchison.

Dr. F. E. Thompson and Dr. Muirhead who were proposed at the last meeting, were balloted for and elected.

Dr. Wyatt Johnson showed a specimen of multiple syphilitic osteitis affecting the tibia and cranium. It evidently began in the form of gumma which then went on to condensation and thickening, traces of inflammatory tissue still being visible. In the cranium in some places, there was partial necrosis, while in other places, thickening; diploe being in many places converted into compact tissue. The larynx was also shown on which there were densely pigmented plaques. The intestine was also shown from the same patient, there being syphilitic ulceration; but it probably began as perityphilitis. The appendix which was laying over the brim of the pelvis on the right side, was apparently affected secondarily from inflammation spreading from the rectum instead of being as is usually the case, the original cause of the trouble. The history of the case was that the man had had syphilis (a severe attack) 5 years ago, involving the rectum, and then spreading to the appendix. The principal symptoms were tenesmus and diarrhoea, the actual condition not having been diagnosed.

Dr. H. L. Reddy then showed a specimen of perforating ulcer of the stomach occurring on the posterior surface of the lesser curvature. She had been under the care of Dr. Stewart one year ago for ulcer of the stomach, since which she had been very anemic. She was confined in the Western Hospital a few months ago, from which she recovered fairly. Dr. Reddy had been suddenly called a few nights ago and found her suffering from purulent peritonitis, which in spite of the saline treatment, which gave her immediate relief, resulted in a fatal termination a day or two later. He had been very much struck with the immediate relief from the frightful agony afforded by the salines. On examining the specimen, there was a good deal of scar tissue, showing that the ulcerating process had been going on and repeating itself

for a considerable time. There was also parenchymatous degeneration of the heart. Dr. Reddy also referred to another case. A nurse in the hospital, who died from the same cause and very much in the same way. Dr. Laphorn Smith spoke strongly in favor of the saline treatment for peritonitis. He felt sure that he had had several cases of commencing peritonitis, which had been saved by prompt resort to this treatment. This was especially satisfactory, as it was well known that the opium treatment was almost always fatal. Dr. Shepherd expressed the opinion that the relief from pain in the course of peritonitis, is deceptive, as it is generally the forerunner of death. He did not attribute it in this case to the saline treatment. Dr. Richard MacDonald also spoke of the absence of pain not being a reliable evidence of improvement. He had seen fatal cases of peritonitis result from appendicitis, in which, after two days of intense pain, there was a sudden lull in all the symptoms, and just when he was congratulating himself that the patient was saved, he suddenly died.

Dr. England exhibited a man with a peculiar pedunculated tumor hanging between the thighs, which was growing rapidly and causing the patient some inconvenience from its bulk. Dr. Shepherd thought it was a case of *molusum fibrosa*. Dr. Molson reported that he had administered ether to the patient, supposed to be a case of anchlosis, whom he had exhibited at the last meeting. The result of the test being that there was complete immobility of all the vertebral articulations and the case was one therefore, genuine anchlosis.

Dr. Hutchison of Point St. Charles exhibited a sublingual or submaxillary calculus which had ulcerated through the duct and the mucous membrane of the floor of the mouth, and which he had removed. It was about the size of a bean. He thought these cases were rather rare.

Dr. Smith referred to two specimens of salivary calculus which he had removed, one about the size of a pigeon's egg from Steno's duct, with considerable difficulty, being obliged to slit up the entrance on the inside of the cheek; the other the size of a large almond, he had removed with considerable difficulty, being obliged to make an opening the whole length of the tonsil before he could drag the oval calculus out. The center of the calculus was composed of pus, resulting from an abscess, and the outside layers by accretion from the salivary fluids.

Stanley's recent Enin expedition was equipped entirely with Fairchild's Digestive Ferments in preference to any others and in the recent attack of gastritis from which Mr. Stanley suffered, he was entirely sustained upon foods previously digested with Fairchild's Extractum Pancreatis.

## Progress of Science.

### DIABETIC COMA AND ITS TREATMENT.

Stadelmann, as the results of clinical and experimental observation on this subject, comes to the following conclusions:

1. Diabetic coma—apart from the accidental coma due to other causes—occurs only in the case of diabetic patients whose urine contains oxybutyric acid.

2. Almost equivalent in value with the recognition of oxybutyric acid is the determination of the amount of ammonia in the urine; while it is also far easier of performance.

3. Diabetic patients with an excretion of ammonia of more than 1.1 gramme per day, are in danger of becoming severe cases of the disease.

4. Patients excreting two, four, six, and more grammes of ammonia daily, need constant watching by the physician, and are in constant danger of passing into diabetic coma.

5. If the determination of the presence of oxybutyric acid, or the estimation of the amount of ammonia, can not be carried out, at least the chloride of iron test should be made. If this gives a positive reaction, oxybutyric acid is present in the urine, and the cases answer to the statements made in the 3rd and 4th conclusions. The converse of this is, however, not always true, for there are cases of diabetes with oxybutyric acid in the urine, and even suffering from diabetic coma, whose urine does not give the chloride of iron action.

6. These severe cases in which there is an increase of the secretion of ammonia or the presence of oxybutyric acid with the chloride of iron reaction in the urine, are only with the greatest caution, and the simultaneous exhibition of alkalies, to be put upon a strict meat diet.

7. If there is fear of the development of diabetic coma, the patients should be put upon full doses of the alkalies, though, of course, with strict oversight and with proper interruptions in the treatment.

8. If coma has already developed, large intravenous injections of a solution of the carbonate of sodium and the chloride of sodium should be given as quickly as possible; the patient being carefully watched meanwhile. The injections should be stopped if threatening symptoms appear, such as irregularity or marked retardation of the pulse, convulsions, or temporary cessation of respiration. After a time they should be recommenced, and the process continued until the urine becomes alkaline.

9. Subcutaneous injections of carbonate of sodium are not to be commended, on account of the pain and deep-seated inflammation they produce.—*Am. Jour. of the Med. Sciences.*



## TREATMENT OF ACNE.

In the *Revue Thérapeutique Médico-Chirurgicale*, Isaacs recommends the following for acne :

R.—Camphor,  
Vaseline, } of each 150 grains.  
Beta-naphthol, }  
Precipitated sulphur 1½ ounce.  
Green soap, 1½ ounce.—M.

Apply to the affected part for from three to fifteen minutes, according to its susceptibility. After using this lotion, use in its place, after thoroughly drying the skin :

R.—Resorcin,  
Salicylic acid, } of each 7 to 15 grains.  
Oxide of zinc, 30 grains.  
Vaseline, 6 drachms.—M.

This is to be allowed to remain on all night, or a less time if it is too stimulating, and is itself to be followed by an emollient, such as cold cream or chalk powder.

TREATMENT OF METRORRHAGIA BY  
ERGOTINE INJECTIONS.

When ergotine is badly tolerated by the stomach, it is recommended that it be used in the following manner in metrorrhagia :

The bowel having been first evacuated of faecal matter and the rectum washed out, a teaspoonful of the following is to be mixed with two tablespoonfuls of hot water and injected :

R.—Ergotine, 150 grains.  
Distilled water, 2½ ounces.  
Glycerin, 6 drachms.  
Salicylic acid, 6 grains.

—*Revue Gén. de Clin. et de Thérapeutique*, Aug. 6, 1890.

TREATMENT OF SYPHILIS BY RECTAL  
INJECTIONS OF IODIDES.

According to the *Revue Générale de Clinique et de Thérapeutique*, the following formula may be used by the anus, whenever the stomach is disordered :

R.—Iodide of potassium, 15 grains.  
Extract of belladonna, ¼ grain.  
Water, 4 ounces.—M

The solution must be warm, and is said to be well borne and effective.

## VESICULAR ECZEMA OF THE HANDS

In the acute form of this affection Dr. Dühring recommends, as one of the best forms of treatment, a salicylic-acid plaster, as the following :—

R.—Acidi salicylici, 1.00 gramme (gr. xv).  
Pulv. amyli, 8.00 grammes (ʒij).  
Zinci oxidi, 8.00 grammes (ʒij).  
Cosmolini, 16.00 grammes (ʒiv).—M.

This should be applied three or four times daily, the parts being well covered with the paste, to protect the skin and exclude the air. Should this not prove decidedly beneficial in a few days, black-wash, followed by oxide of zinc ointment will be advisable. Internally, a tonic, saline, aperient mixture will probably prove of value. A drachm and a half (6 grammes) of sulphate of magnesium, and 1 grain (0.064 gramme) of sulphate of iron in a gobletful of water, to be taken a half hour before breakfast, daily, may be prescribed for the next week or two.

In the sub-acute form a more stimulating treatment is indicated, and a calomel ointment, 20 or 30 grains (1.28 or 2.00 grammes) to the ounce (31 grammes) of oxide of zinc ointment, should be ordered. In three or four days, should no improvement take place, an ointment of resorcin, 30 grains (2 grammes), and salicylic acid, 10 grains (0.64 gramme) to the ounce (31 grammes) should be substituted, to be followed later by a tarry wash of 1 drachm (4 grammes) of the alcoholic solution of coal-tar to 8 ounces (240 cubic centimetres) of water.—*The Medical News*, August 30, 1890, p. 202.

## CYCLING AND HERNIA.

A somewhat unnecessary amount of alarm may possibly be created on the subject of cycling by some recent correspondence, especially as a statement purports to have been made by more than one medical man that cycling predisposes to hernia. One correspondent appears to attribute all the harm to sitting too high on the machine. If danger exist it is due rather to the fact that scarcely 5 per cent. of the riders make any attempt to fit themselves to their machine. As a rule, the handles are far too low, and the seat too far back or forward. Of the comfort of sitting up with the handles in such a position as not to necessitate bending the back nearly double, we can speak from personal experience. No one who has once got his handles high enough, his feet in the right position, and his seat at a proper angle, will ever ride his machine so as to strain his legs, bend his back, or bruise his perineum.—*The British Medical Journal*, August 16, 1890, p. 399.

## AMYLENE HYDRATE IN EPILEPSY.

Nache agrees with Wildermuth as to the value of amylene hydrate in epilepsy, even where bromides have failed, and where the attacks are not only very frequent but severe. He uses a 10-per-cent. solution of the drug, and gives from one to two tablespoonfuls a day (from 30 to 90 grains). Nache also believes that *petit mal* and nocturnal epilepsy are benefited by the drug.—*Medical News*.

## DIGITALIS IN TYPHOID FEVER.

After a great number of experiments Dr. Leidy concludes that in the healthy adult digitalis lowers the temperature 1 to  $1\frac{1}{2}$  degrees, and this diminished temperature persists for one or two days. In typhoid cases digitalis diminishes the frequency of the pulse, the number of the respirations, and the temperature, these three effects being produced simultaneously.

Its use is indicated when there are symptoms of feeble heart-action, especially when it is accompanied by great adynamia. It is contra-indicated when the pulse is full and bounding.

Dr. Leidy prefers the tincture in typhoid fever, and the infusion if there be any chronic cardiac trouble. Moreover, he does not hesitate, if there is gastric intolerance, to give the remedy hypodermically, and notes successful results when it is combined with cool water and quinine.—*L'Union Médicale*, August 7, 1890, p. 189.

## AMMONIUM BROMIDE FUMES IN ASTHMA.

The value of the fumes of ammonium chloride in some varieties of bronchial and naso-pharyngeal catarrh, suggested the use of the bromide salt in the same diseases complicated with spasm. The ordinary solutions of hydro-bromic acid were found to be useless, for the purpose, and a strong acid, with a specific gravity of 1.7, was substituted. This, with a solution of ammonia, gave abundant fumes. In several patients suffering from asthma, a few whiffs relieved the dyspœna at once. In some cases, when used early, the inhalations aborted the paroxysms.—*Medical News*, June 14, 1890.

## OLIVE OIL IN GALL-STONE COLIC.

During the last few years clinical experience has been strongly in favor of the beneficial results following the use of olive oil in the treatment of gall-stones, but no adequate explanation has hitherto been offered. Dr. D. D. Stewart suggests an explanation which certainly is ingenious. He believes that the effect possibly results from the decomposition of oils and fats in the duodenum into their fatty acids and glycerine; and he suggests that, as glycerine in the rectum causes hyperemia, irritation, and powerful reflex peristalsis, so in the duodenum it may cause energetic reflex contraction of the gall-bladder, cystic and common bile ducts, and perhaps may lead to a copious outflow of diluted bile, which would aid in expelling the stone. He believes a free flow of pancreatic juice is necessary for the splitting up of the oil, and that the failures of the oil treatment may, perhaps, be explained by the concurrent employment of belladonna or atropine, which suppresses the pancreatic secretions.—*Lancet*, June 4, 1890

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## EDITORS:

A. LAPTHORN SMITH, B.A., M.D., M.R.C.S., Eng., F.O.S., London  
F. WAYLAND CAMPBELL, M.A., M.D., L.R.C.P., London.

## ASSISTANT EDITOR

ROLLO CAMPBELL, C.M., M.D.

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MONTREAL, DECEMBER, 1890.

## FEWER DRUGS.

It is one of the illusions and also one of the misfortunes of the young graduate that he leaves the university with the idea that there are some four or five thousand drugs at his command, each one of which will do exactly what it is represented to do in the pharmacopœa. He starts in practice, is called to his first case, tries one after the other of half a dozen drugs which are highly recommended, and just when he is about to try the best one, his patient is transferred to some body else, very probably to an older and more knowing practitioner, who in the course of 50 years, has rooted out 4,950 of the 5,000, keeping only a few remedies, but each one of which he knows by long experience to be reliable. We remember many instances of this in our younger days. For instance, an old gentleman underourcare suffering from bronchitis was getting worse and worse under a costly prescription containing all the new drugs recommended for this disease, when one of the oldest practitioners was called in consultation, and much to our surprise, ordered nitrate of potash, and as a matter of fact

cured the patient. The longer one is in practice the smaller the number of drugs he will employ, and the greater will be his success. Whenever it is possible, it is far better to depend upon a solution of the alkaloid than upon tinctures and extracts of the crude material, for the reason that one ounce of the alkaloid may represent all the way from a cwt. to a ton of the raw material, it being well known that plants gathered in different countries and at different seasons of the year vary enormously in the amount of active material they contain.

Instead of ordering tincture of nux vomica we should order liquor strychniae; instead of tincture belladonna, we should use liquor atropiae; instead of crude aloes, aloine; instead of opium, morphine; instead of hyoscyamus, hyoscyamine; and so on. For those who keep their own medicines, there are two ways of using these active principles; either in the form of tablet triturates from a thoroughly reliable maker, or else to purchase the alkaloid and to make alcoholic solutions of the strength of four grains to the oz. We say alcoholic solutions, because made of distilled water alone, they will not keep. It does not require that the alcohol should be pure, as between 25 and 50 per cent. of it will be sufficient to prevent the growth of bacteria; or if there is any objection to alcohol, then 25 per cent. of glycerine will do. The strength of any of these liquors is invariably  $\frac{1}{120}$  of a grain to the minim or one half grain to the drachm.

New drugs are constantly being introduced, and out of every one hundred brought before the notice of the profession, perhaps one becomes permanent in the pharmacopoea; but it will be better that the experiments should be made, not by the young practitioner, who can ill afford to lose his one patient because the new drug fails, but by the hospital and dispensary physician who can establish the worthlessness of the majority of them without in-

jury to his practice. Many of the new drugs, while not being worthless, are not so good as the best of their particular class, and it is unwise to lay aside a well tried and reliable remedy for one which often fails.

#### DR. ROBERT COSTIGAN.

We record with feelings of pain the death of Dr. Robert Costigan, which took place at Los Lunas, New Mexico, the end of October, where he had resided for a number of years. Dr. Costigan was a native of Montreal and was employed for sometime by the old drug firm of Lamplogh & Campbell, which he left to study Medicine at Bishop's College in this city. He was among the first to enter as a student of that school in its organisation in 1871, and the first graduate to receive his entire medical education within its walls. He graduated from Bishop's in 1874 taking the prize for the best final examination. He had formerly taken in 1872, the Junior prize in Practical Anatomy and in 1873 the Physiology prize, for the second time, Dr. Costigan was held in high estimation by all who knew him, and his death at an early age will be heard of with regret. His body was brought to Montreal and interred.

#### PERSONAL.

Dr. J. M. Jack (M. D. Bishop's 1889), has been elected Dermatologist to the Montreal Dispensary.

Dr. Lafontaine of Waterbury, Conn. (M. D. Bishop's 1884), was in Montreal the end of October, and paid a visit to his Alma Mater.

Miss Grace Ritchie and Miss Maude Abbott, both B. A. of McGill University, are attending the Medical courses of University of Bishop's College.

Dr. J. M. Jack (M. D. Bishop's 1889), who has decided to devote himself to Dermatology, has left for Vienna, where he will devote a year in studying up his specialty.

Dr. Lefebvre of Vancouver B. C., was in Montreal the early part of November, and attended the meeting of the Medico-Chirurgical Society on the evening of the 7th.

The many friends of Dr. George Ross, Vice Dean of the Medical Faculty of McGill University, will learn with great pleasure of his steady convalescence from his recent illness.

Dr. Thorburn Jr., of Toronto, sailed from New York on the 26th November *en route* for Berlin *re* Dr. Koch. Dr. Thorburn only returned home in September after a prolonged absence in Europe.

Dr. Foley (M. D. Bishop's College 1880) who has devoted himself to Dermatology for the last five years, is surely gathering around him a numerous *clientele*. In answer to a correspondent we give his address, viz., 55 Union Avenue.

Dr. Homer E. Mitchell (M. D. Bishop's College 1878), of Stanbridge Station, was in Montreal the end of November and made a visit to his *Alma Mater*. Dr. Mitchell is now one of the leading physicians in the Eastern Townships, and has a very extensive practice.

Dr. George T. Ross, Professor of Physiology in Bishop's College. Faculty of Medicine, left for Germany on the 24th November to study Dr. Koch's lymph discovery. He will represent officially his Faculty, and he carries with him letters of introduction, which will very materially assist him in his work.

Dr. McGannon of Brockville, Ont., (M. D. McGill 1887), is a member of the Medico-Chirurgical Society of Montreal, and attends its meetings with great regularity. In coming over a hundred miles for this purpose, he sets a noble example to some of our big city members, who can seldom be induced to travel a few hundred yards for the same purpose.

Dr. Thos. Bulmer (M. D. Victoria College 1877), who practised for a short time in this city after taking his degrees passed through Montreal a short time ago, *en route* for Victoria, British Columbia, where we learn he has opened an office. During the interval Dr. Bulmer has been in New Guinea, New Zealand, and Australia. At Victoria he was for some time Quarantine Superintendent. His health being poor he returned to England, and settled in Leeds, whence he left the past summer for Canada.

Dr. Elder (M. D. McGill 1884), has removed from Huntingdon, P. Q. to Montreal. Before he left, on the evening of the 6th November, at a public meeting, largely attended by the principle inhabitants of Huntingdon and neighborhood, he was presented with a very flattering address, substantial recognition of the estimation in which he was held, in the shape of three carvers in a hand-some case, and three silver dishes. We congratulate Dr. Elder on this pleasant episode in his life, and welcome him to Montreal, where he will soon occupy, we feel sure, a distinguished position.

We regret that ill health has compelled Dr. E. H. Tienholm to relinquish practice in Montreal. He left the city the end of October with the intention of going to Los Angeles, on the way stopping over for a short time at the Sanit-

arium at Battle Creek, Michigan. It is the wish of all his friends that the change will be beneficial, though we hardly think it likely that he will ever again be able to stand the vicissitudes of our Canadian climate. During his long career here he established the reputation of being a bold, judicious and successful operator in the realm of gynecology.

## BOOK NOTICES.

INDEX-CATALOGUE OF THE LIBRARY OF THE SURGEON-GENERAL'S OFFICE, United States Army. Authors and Subjects. Volume XI. Phædronus. Regent. Washington: Government Printing Office, 1890.

This wonderful work is gradually nearing completion. We see that so far 115,000 books and pamphlets and 350,000 journal articles have been indexed already. Such a costly and laborious undertaking is well worthy the richest and most industrious nation on earth, which alone could undertake it.

TEXT-BOOK OF MATERIA MEDICA FOR NURSES. Compiled by Lavinia L. Dock, graduate of Bellevue Training School for Nurses; Superintendent of Grace Memorial House. G. P. Putnam's Sons. The Knickerbocker Press, 1890. For sale by Wm. Foster Brown & Co., 233 St. James Street, Montreal. Price \$1.25.

So many young ladies now are adopting the noble vocation of nursing, some such work as the book before us may become necessary in order to give the former an elementary knowledge of the drugs and the remedies which they may be called upon to administer.

MAY'S DISEASES OF WOMEN, being a concise and systematic exposition of the theory and practice of gynecology for the use of students and practitioners. Revised by Leonard T. Rau, M.D., with thirty-one illustrations on wood. 12 mo., 370 pages. Philadelphia; Lea Brothers & Co., 1890.

This is a remarkably concise but complete compilation of the subject taken from a dozen of the best treatises and journals on Diseases of Women. We have looked up several chapters and find all the author's statements to be correct. It is remarkable how much information can be got into a small work like this by condensation. We can recommend it to students and busy practitioners who wish to get at the gist of the subject without spending time which they can ill afford to hunt up what they want to know in the fearfully prolix systems of gynecology.

BARTLEY. MEDICAL CHEMISTRY. A text-book for Medical and Pharmaceutical Students. By E. H. Bartley, M.D., Associate Professor of Chemistry at the Long Island College Hospital, President American Society of Public Analysts. With over 40 illustrations. Second Edition, enlarged. 12mo. Cloth, \$2.50. P. Blakiston, Son & Co., 1012 Walnut Street, Philadelphia.

This is a complete but handy sized text-book,

divided into four parts. Part I is devoted to Physics, the chapter on electricity being exceedingly interesting. Part II deals with Theoretical Chemistry; Part III, Inorganic Chemistry; Part IV, Organic Chemistry. This latter is well written, and deals fully with nearly all the most recently discovered substances, such as ptomaines and the coal tar group, such as antifebrin and phenacetin. In addition to these four parts there is an appendix containing analyses of the various fluids of the body, and a glossary or dictionary of the most used chemical terms. The printing closely covers over 400 pages, but being printed on good paper it makes easy and pleasant reading. Although we do not pretend that it is the best work we have ever seen on the subject, we can safely say that it is *one* of the best we have ever seen for its size and price, and it appears to be thoroughly up to date.

A COMPEND OF EQUINE ANATOMY AND PHYSIOLOGY, by Wm. R. Ballou, M. D. Professor of Equine Anatomy, and formerly Lecturer on Physiology, New York College of Veterinary Surgeons, &c. With 29 graphic illustrations selected from Chanocean's "Comparative Anatomy." Philadelphia, P. Blakiston, Son & Co. 1890. pp. 205. Price \$1.00

This little book forms one of the "Quiz-Compend" series, and seems to be a very good work for veterinary students, whereby they can get up their anatomical knowledge for examinations.

ESSENTIALS OF PRACTICE OF MEDICINE, abridged in the form of Questions and Answers, prepared especially for Students of Medicine, by Henry Morris M. D., visiting Physician to St. Joseph Hospital, Fellow College of Physicians, Philadelphia, with a very complete appendix on the examination of the urine, by Laurence Wolff, M. D., demonstrator of Chemistry, Jefferson Medical College, Philadelphia. W. B. Saunders, 913 Walnut St., 1890.

This is a work of over four hundred pages, convenient in size, well and clearly printed upon beautiful white paper. It is a *multum in parvo*, and yet in its brevity, care evidently has been taken not to sacrifice essentials. Although the book forms one of Saunders' question compends, and has therefore been prepared to assist final students in preparing for degree examinations, yet it is full enough, to justify it being of excellent service to busy practitioners. It is just such a publication as should always be at hand on the library or consulting-room table. A five minutes perusal of it at any time would refresh the memory on the essential symptoms diagnosis and treatment of any diseases. The chapter on chest diseases we regard as of great excellence. We have seldom seen so much put into such small compass and so well put together. The cost of such a book is money well invested. The appendix on "The Examination of Urine" helps to elucidate the principals and difficult points in Urinalysis.

ESSENTIALS OF PRACTICE OF PHARMACY. Arranged in the form of questions and answers. Prepared especially for pharmaceutical students. By Lucius E. Sayre, Ph. G. 179 pages, 16mo, \$1.00. Philadelphia: W. B. Saunders, 1890.

This is one of the well-known Saunders' series

of Question Compend, and the little volume will doubtless prove to be equally as serviceable as an aid to the pharmaceutical student as its predecessors have been, each in their individual line of research. It covers a great deal of ground in small compass, and the matter is well digested and arranged and so printed as to be convenient in use and attractive to the eye. The "research questions" are a valuable feature of the book, and, properly used, will lead the student to a profitable study of the pharmacopoeia. It is a very creditable little book, and is well worthy of careful perusal.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS, consisting of Original Treatises and Reproductions, in English, of books and Monographs selected from the latest literature of foreign countries, with all illustrations, etc. Contents The Treatment of Uterine Affections by Massage; by Dr. Eugene Arendt. Cosmetics; a treatise for physicians; by Dr. Heinrich Paschke. On affections of the stomach in diseases of the male genital organs; by Dr. Alexander Feyer. Published monthly, price. \$10.00 a year, single copies, \$1.00. November, 1890. New York; William Wood and Company 56 and 58 Lafayette Place, 1890.

A PRACTICAL TREATISE ON IMPOTENCE, STERILITY AND ALLIED DISORDERS of the Male Sexual Organs; by Samuel W. Gross, A. M., M. D., LL. D., Professor of the Principles of Surgery and Clinical Surgery in the Jefferson Medical College of Philadelphia, etc. Fourth edition, revised by F. R. Sturgis, M. D., 8vo; pp. vii.—173. Philadelphia: Lea Brothers & Co. 1890.

The rapid sale of three editions of this work and its translation and publication in foreign languages, attest its value and appreciation by the medical profession. Those who have not done so already should secure a copy of this new edition, as it explains many pathological conditions that are of interest to the general practitioner. The publishers have finished the little volume in their usual excellent manner.

A TEXT-BOOK OF COMPARATIVE PHYSIOLOGY. For Students and Practitioners of Comparative (Veterinary) Medicine. By Wesley Mills, M.A., M.D., D. V. S., Professor of Physiology in the Faculty of Human Medicine and the Faculty of Comparative Medicine and Veterinary Science of McGill University, Montreal; Author of a Text-Book of Animal Physiology, etc. With 476 illustrations. Cloth, 8vo. Pp. 636. New York: D. Appleton & Co. Cincinnati: R. Clarke & Co. Price, \$3.00.

This work, following closely upon the author's large work on animal physiology, will no doubt be accorded the same favorable reception. Though this work was prepared primarily for the use of students of veterinary medicine, and veterinary practitioners, yet physicians who are engaged in healing the diseases of their fellow-men will find that the study of it will be of equal value to themselves. A great part of the work is devoted to treating physiology in general. The study of the characteristics of muscular tissue is made particularly interesting. Instructors of physiology will

do a great deal towards advancing the knowledge of their pupils by recommending to them the perusal of this volume. There are but very few works upon veterinary physiology. We believe that until quite recently students attending veterinary colleges have been under the necessity, for the most part, of studying works on human physiology to obtain their required knowledge. The work of Prof. Mills will consequently supply, in a very effectual way, one long felt want.

"OINTMENTS AND OLEATES, ESPECIALLY IN DISEASES OF THE SKIN," by John W. Shoemaker, A.M., M.D., Professor of Materia Medica, Clinical Med., etc., in the Medico-Chirurgical College of Philadelphia. Second edition, revised and enlarged. F. A. Davis, publisher. Price, \$1.50 nett.

Probably no other man in the world has given so much attention to external applications in the various diseases of the skin as Dr. Shoemaker, and the results of his studies and experience is embodied in this work. The use of the oleates in medicine has increased of late, and would probably come into more general use if physicians had ready formulas for their preparation. This, the book amply provides for. Indeed, there is scarcely a formula in the English, German or Spanish pharmacopœia that is not to be found in it. It is invaluable as a ready reference when ointments or oleates are to be used, and is serviceable to both druggist and physician.

SAUNDERS' QUESTION COMPENDS. ESSENTIALS OF DISEASES OF THE EYE, NOSE AND THROAT. By Edward Jackson, A. M., M. D., Professor of Diseases of the Eye in the Philadelphia Polyclinic and College for Graduates in Medicine, etc., and by E. Baldwin Gleason, S.B., M.D., Surgeon in charge of the Nose, Throat and Ear Department of the Northern Dispensary of Philadelphia, etc. With 118 illustrations. Philadelphia: W. B. Saunders, 913 Walnut street. 1890.

This number of the Question Compend is fully up to the high standard of the excellent series of which it forms a very essential part. While its arrangements does not materially differ from the others of the series its use is designed to be somewhat more extensive. Most of the compends are chiefly adapted to the use of students in reviewing and preparing for examinations. This one is applicable not only to the students' purposes, but may be appealed to with confidence and profit by the general practitioner. The manner of bringing out the points by asking questions is excellent, and gives a definiteness to the information, which renders it especially apt to remain impressed upon the mind. The chapters upon refraction are particularly plain and easily understood, and will be acceptable to those who have been deterred from studying this abstruse subject because of the mathematical problems usually attending it. The chapters on the nose and throat are also clear and concise. In fact clearness and directness characterize the little work throughout. Quite a number of illustrations (considering the size of the book) of an extremely high character are spread over its pages.

A MANUAL OF PUBLIC HEALTH. By A. Wyntee Blyth, M. R. C. S., L. S. A., Barrister-at-Law, Medical Officer of Health and Public Analyst for St. Marylebone. London and New York: MacMillan & Co. 1890.

This is a work which has been written for the guidance of Medical Health officers and officials under them. Section I. treats of Vital Statistics. Section II. Air Ventilation and Warming. Section III. Meteorology. Section IV. Water Supply. Section V. Drains, Sewers, Sewage Disposal. Section VI. Nuisances. Section VII. Disinfection and Disinfectants. Section VIII. Zymotic Diseases. Section IX. Isolation Hospitals. Section X. Food and Diet. Section XI. The Duties of Sanitary Officers. Section XII. Inspection of Food. We have given this work a careful perusal, and have great pleasure in testifying to the thorough and conscientious manner in which the author has prepared his work. The articles on nuisances and on tubercle are exceedingly interesting. The whole history of the experimental study of the tubercle bacillus from the time of its discovery almost to the present day is fully recorded, and directions are given for the artificial cultivation and weakening of the plant. It throws a great deal of light upon Koch's work in this direction. Every member of Boards of Health should at once procure this book.

A TREATISE ON THE DISEASES OF INFANCY AND CHILDHOOD. By J. Lewis Smith, M.D., Clinical Professor of Diseases of Children, Bellevue Medical College, New York, &c. Seventh edition. Thoroughly revised with fifty-one illustrations. Philadelphia: Lea Brothers & Co. 1890

This work has been so long and favorably known as a standard text-book that the task of the reviewer is a very light one. It has been so often revised that the author has been able to make it almost perfect. As he says in his preface, "since the issue of the sixth edition of this treatise in 1886, so many additional facts have come to light relating to the etiology, nature and treatment of the diseases of children, that the necessary revision has produced virtually a new book. In the amount of information presented, the work may properly be considered to have doubled in size, but this real growth has been accommodated without rendering the volume inconveniently large." A paper by Dr. Joseph O'Dwyer on Intubation has been added, which is very interesting. We may add that the work covers nearly 900 pages, and has a carefully arranged index; the whole being gotten up in Lea Brothers usual first-class style.

DICTIONARY OF PRACTICAL MEDICINE BY VARIOUS WRITERS. Edited by James Kingston Fowler, M.A., M.D. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street.

This is a work which merits more than a passing notice in our columns. On looking over the list of contributors we notice the names of many of the ablest of the younger men, the majority of them being assistant physicians and assistant surgeons at the great hospitals of London, although some of them, such as Herman, are among the senior men on the staffs. The effect of employing the new generation in its preparation has had a distinct and decided effect in the character of the work, principally evidenced by the newness and conciseness of the information given on each subject. On looking over the index which is placed at the beginning of the book we can see that hardly anything of importance pertaining to medicine has been left out. Although it covers nearly a thousand pages of pretty fine print we can hardly ex-

pect that each subject could be treated exhaustively in that space, but we think that this is out of place in a dictionary when everything should be short and to the point. There is a tone of conservatism but fairness all through it, especially on Diseases of Women by Herman, which is characteristic of English writers, and which renders it a safe book to refer to.

SAUNDERS' QUESTION-COMPENDS, No. 15. Essentials of the Diseases of Children, arranged in the form of Questions and Answers; prepared especially for Students of Medicine, by William M. Powell, M.D., Physician to the Clinic for the Diseases of Children in the Hospital of the University of Pennsylvania. W. B. Saunders, 913 Walnut street, Philadelphia.

There can be no doubt that this little volume will prove highly acceptable both to the final year student as well as the young physician; for no one subject receives so little attention during the four years medical course, and yet none are of more importance to the junior practitioner, who is cast adrift from his *Alma Mater* with but a small amount of knowledge as to how to deal with the many diseases to which children are heir. The book is arranged in questions and answers, in this way placing before the student in a very few lines and in a concise and easily remembered manner that which in an ordinary work on Diseases of Children would require several pages of reading to give a like amount of information. We can heartily recommend this to our readers.

THE MEDICAL BULLETIN VISITING LIST OR PHYSICIAN'S CALL RECORD. Arranged upon an original and convenient monthly and weekly plan for the daily recording of professional visits. Price \$1.25. F. A. Davis, Medical Publisher and Bookseller, 1231 Filbert street, Philadelphia, Pa.

Having used this visiting list for several years past we can speak most highly of its utility and labor-saving qualities, as the names of patients only require to be re-written once a month. This visiting list contains a Calendar for the last six months of 1890, all of 1891 and 1892; Table of Signs to be used in Keeping Accounts; Table of Fees; Dr. Ely's Obstetrical Table; Tables for Calculating the Number of Doses in a given R, etc., etc.; for Converting Apothecaries' Weights and Measures into Grammes; Metrical Avoirdupois and Apothecaries' Weights; Number of Drops in a Fluidrachm; Graduated Doses for Children; Graduated Table for Administering Laudanum; Periods of Eruption of the Teeth; The Average Frequency of the Pulse at Different Ages in Health; Formulæ and Doses of Hypodermic Medication; Use of the Hypodermic Syringe; Formulæ and Doses of Medicines for Inhalation; Formulæ for Suppositories for the Rectum; The Use of the Thermometer in Disease; Poisons and their Antidotes; Treatment of Asphyxia; Anti-Emetic Remedies; Nasal Donches; Eye-Washes, etc., etc. It is evident to every one that this is, beyond question, the best and most convenient time and labor-saving Physician's Pocket Record Book ever published. Physicians of many years' standing and with large practices pronounce this the best list they have ever seen. It is handsomely bound in fine, strong leather, with flat, including a pocket for loose memoranda. It is compact and convenient for carrying in the pocket. Size, 4x6½

inches. In three styles. No. 1, Regular size, to accommodate 70 patients daily each month for one year, \$1.25; No. 2, Large size, to accommodate 105 patients daily each month for one year, \$1.50; No. 3, In which the "Blanks for Recording Visits in" are in removable sections, \$1.75.

THE PHYSICIANS VISITING LIST for 1891. (Fortieth Year of its Publication.) P. Blakiston & Son, publishers, 1012 Walnut Street, Philadelphia. Price \$1.00 to \$1.75 according to size.

Contents:—Almanac for 1891 and 1892. Table of Signs to be used in keeping accounts. Marshall Hall's Ready Method in Asphyxia. Poisons and Antidotes, revised for 1890. The Metric or French Decimal System of Weights and Measures. Dose Table for 1891, by Hobart Amory Hare, M.D., Demonstrator of Therapeutics, University of Pennsylvania. List of new Remedies, revised for 1891. Aids to Diagnosis and Treatment of Diseases of the Eye, Dr. L. Webster Fox, late Clinical Asst. Eye Dept., Jefferson Medical College Hospital, and G. M. Gould, M.D., Ophthalmic Surgeon to the Philadelphia Hospital; Clinical Chief Ophthalmological Dept., German hospital, Philadelphia. Diagram Showing Eruption of Milk Teeth, Dr. Louis Starr, late Prof. of Diseases of Children, University Hospital, Philadelphia; Physician to the Children's Hospital. Posological Table, Meadows. Disinfectants and Disinfecting. Examination of Urine, Dr. J. Daland, based upon *Tyson's* "Practical Examination of the Urine." 6th Edition. Incompatibility, Dr. S. O. L. Potter. (Taken from Dr. Potter's Handbook of Materia Medica, Pharmacy and Therapeutics, 2d Edition.) A New Complete Table for Calculating the Period of Utero-Gestation. Sylvester's Method for Artificial Respiration. Illustrated Diagram of the Chest. Blank Leaves, suitably ruled for Visiting Lists, Monthly Memoranda, Addresses of Patients and others; Addresses of Nurses, their references, &c.; Accounts asked for; Memoranda of Wants; Obstetric and Vaccination Engagements; Record of Births and deaths; Cash Account, etc.

We have used this visiting list for the last 10 years and could not do without it. It has saved us hundreds of dollars during that time. If you have not tried it, order it from your stationer at once and you will find it worth many times its cost.

The Physician's all-requisite Time and Labor-Saving Account-Book; being a Ledger and Account-Book for Physicians' Use, Meeting all the Requirements of the Law and Courts.

We may mention a few of the superior advantages of *The Physician's all-Requisite Time and Labor-Saving Account-Book*, as follows:—1. Will meet all the requirements of the Law and courts. 2. Self-explanatory; no cipher code. 3. Its completeness without sacrificing anything. 4. No posting; one entry only. 5. Universal; can be commenced at any time of the year, and can be continued indefinitely until every account is filled. 6. Absolutely no waste of space. 7. One person must needs to fill sick every day of the year to fill his account, or might be ten years about it and require no more than the space for one account in this ledger. 8. Double the number and many times more than the number of accounts in any similar book; the 500-page book contains space for 900 Accounts, and the 600-page book contains space for 1800 accounts. 9. There are no smaller spaces.

10. Compact without sacrificing completeness; every account complete on same page—a decided advantage and recommendation. 11. Uniform size of leaves. 12. The statement of the most complicated account is at once before you at any time of month or year—in other words, the account itself as it stands is the simplest statement. 13. No transferring of accounts, balances, etc. To all physicians desiring a quick, accurate, and comprehensive method of keeping their accounts, we can safely say that no book as suitable as this one has ever been devised. Net prices, shipping expenses prepaid: No. 1. 300 Pages, per 900 Accounts per year, Size 16x12 Inches, Bound in  $\frac{3}{4}$  Russia, Raised Back-Bands, Cloth Sides, \$5.00 in the United States, and \$5.50 in Canada (duty paid). No. 2. 600 Pages, for 1800 Accounts per year, Size 10x12 Inches, Bound in  $\frac{3}{4}$  Russia, Raised Back-Bands, Cloth Sides, \$8.00 in the United States, and \$8.50 in Canada (duty paid). F. A. Davis, Medical Publisher and Bookseller, 1231 Filbert Street, Philadelphia, Pa.

"EPILEPSY, ITS PATHOLOGY AND TREATMENT," a prize essay, by Hobart Amory Hare, M. D. F. A. Davis, Publisher, Philadelphia. Price, \$1.25.

This essay received the prize of four thousand francs from the Royal Academy of Medicine, in Belgium, in 1889. It is not only a resume of the views held by the best minds of the profession, but a careful analysis of the causes which produce epilepsy. The reader cannot fail to be impressed with the author's logic, and concludes with him, that "the treatment of epilepsy in the past has been as unwise as the treatment of most other diseases." His plans of treatment, while varying little as to the remedies to be employed, yet varies in this, that they are not given in any individual case, simply because they have succeeded in a former one, but that they are indicated by the peculiar phase of the disease, and the constitutional peculiarities of the patient. This work is not only unique, but will fully repay reading. Any practitioner having a single case of epilepsy under his observation should have a copy of this little volume.

A MANUAL OF AUSCULTATION AND PERCUSSION. Embracing the Physical Diagnosis of Diseases of the Lungs and Heart, and of Thoracic Aneurism. By Austin Flint, M. D., LL. D., Professor of the Principles and Practice of Medicine and of Clinical Medicine in the Bellevue Hospital Medical College, etc., etc. Fifth edition, thoroughly revised. By J. C. Wilson, M. D., Lecturer of Physical Diagnosis in the Jefferson Medical College, etc., etc. Illustrated with wood-cuts. Philadelphia: Lea Brothers & Company. 1890. Price \$1.50.

Physical diagnosis is an all-important subject, for the more skilled we are in percussion and auscultation the earlier will we be capable of discovering signs of incipient disease and hence be better able to arrest the various pathological inroads. This little volume is entitled to position as one of the classics in medicine, giving the results of the investigations of one of the best observers that ever graced our profession. The clearness and appropriateness of his style greatly enhance its value. To the student during his hospital attendance this little book should prove extremely efficacious.

#### PAMPHLETS RECEIVED.

Laparotomy for Intestinal Obstruction. By Cornelius Kollock, A.M., M.D., Cheraw, S.C.

The Treatment of the Morphine Disease. By J. B. Mathewson, M.D. Home for Habitues, Brooklyn, N. Y.

Any of these would probably be mailed to our readers on requesting their authors to do so, and by enclosing postage stamps.

The Animal Suture, its Place in Surgery. By H. O. Marcy, A.M., M.D., LL.D., Cambridge, Mass. This is a most interesting history of the subject, and the author moreover makes a strong plea for this suture.

The Relation of Bacteria to Practical Surgery. The Address on Surgery delivered before the Medical Society of the State of Pennsylvania. By John B. Roberts, A.M., M.D., Professor of Surgery in the Woman's Medical College, Philadelphia.

Suppurating Endothelioma. Myo-fibrous in a condition of Necrobiosis. Remarks on treatment of the Pedicle. By Mary A. Dixon Jones, M. D., Brooklyn, N. Y. The talented authoress makes a strong priority claim for the combined method of amputating the uterus by abdominal section, and afterwards removing the stump by vaginal hysterectomy, which we believe is to be the ideal method of the future.

Eight cases of Thyroid Cysts and Adenomata, treated by emucleation. By Charters J. Symonds, M. D., Lond. Assistant Surgeon to Guy's Hospital. In the concluding remarks the author says of the eight cases, six were in women and two in men. Six of the patients were thirty or under, while one was fifty-four. Several methods have been adopted in the treatment of cysts of the thyroid gland. Of the two leading plans, one is that of injecting perchloride of iron and setting up of suppuration, and maintaining drainage. This is known as Mackenzie's, upon which a recent communication has been made by Mr. Howell. This plan takes as a rule many weeks, and is often attended with severe hectic fever. Its chief merit lies in the small resulting scar. Leaving this plan to stand on its own merits, Symonds prefers one that leads to a rapid recovery in a few days.

The Insane in the Province of Quebec. By Dr. A. Vallee, Medical Superintendent of the Quebec Lunatic Asylum. The author's conclusions are as follows:—

1. Insane asylums should retain their character of hospitals for treatment and be reserved as much as possible for dangerous or curable patients;
2. As it is generally admitted that mental diseases are all the more curable according as they are recent, the legislation should make the conditions of admission as easy as possible for patients who are to be treated;
3. Labor should be organized as a means of treatment in our asylums, and workshops should be set up in them and agricultural work made more general so as to provide occupation for the able-bodied insane;
4. Imbecile and idiot children should be placed in institutions where efforts would be made to educate them and teach them trades which would enable them to earn their living;
5. Asylums for inebriates should not receive ordinary insane patients for such a commingling gives rise to serious drawbacks;
6. The uncleanly and demented patients should be placed in refuges where they would receive the treatment they require at a lower cost than in the asylums;
7. The medical board should be authorized to hand over to families who are able to take care of them, certain harmless, quiet and incurable patients who are able to work under supervision; these patients to be sent back to the asylum when necessary;
8. The system of discharges on trial should be made more general for harmless patients with provision for their being at once sent back if necessary.



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## Original Communications.

### GYNECOLOGY IN GENERAL PRACTICE.

By A. LEATHORN SMITH, B. A., M. D., Gynecologist to the Montreal Dispensary, Surgeon to the Women's Hospital, Montreal.

This important department of medicine has made such wonderful and rapid progress and has extended its domain indirectly so much in the human body that the general practitioner must have great difficulty in keeping up with its advances. No sooner is one book out than another is announced to appear, and when it is purchased, a method of treatment in the first is considerably altered and modified in the second. I purpose, therefore, to write a paper on this subject which I hope will contain some useful information, and especially, which shall be up to date. A great many of the most important cases which come into the hands of the specialists might be just as well attended by the family physician, if he but recognized them in the earliest stages, while many others which require the most anxious attention of the specialist might be easily attended to and cured if they had been sent to him sooner. A great many of the diseases from which women suffer began as simple congestion while they were girls, and were due to well-

known and remediable causes, such as, for instance, chronic inflammation and benign tumors of the uterus, tubes and ovaries. This congestion is sometimes passive in its nature, due to mechanical obstruction of the pelvic circulation; which obstruction may have been located in a tight corset pressing upon the inferior vena cava which receives the blood from the pelvis, or it may be due to the tight corset pressing the liver against the main venous trunk, and thus impeding the return of blood to the heart, or the obstruction may be due to overloaded intestines pressing upon the delicate veins which carry the blood from the pelvis into the common iliac veins. All these causes are, of course, remediable, and yet the majority of patients with diseases of the pelvic organs come under my care with these causes operating in full force, and it is my first duty, if I wish to treat them rationally, to remove the causes before attempting to remove the effects. It is hardly credible, but it is my daily experience, both at my clinic and at my office, to have patients reply that their bowels are regular every week or every ten days. Many women consider the question somewhat impertinent, and answer that their bowels are regular when they are not so, either wilfully or from motives of delicacy; but I can give my word for this, that we cannot expect to

make any progress with these cases until we have secured a regular evacuation every day. The corset is an obstruction which has been sanctioned by many years' custom, and which women wear only to satisfy the demand of silly men who admire a small waist, so that it never will be given up until men who are about to marry shall have been taught that a tight corset means a sick wife.

Many of the diseases which come to me in an advanced stage, would readily have been detected by bimanual examination if it had been made. This brings up the question of which cases should a general practitioner examine, and which should he not. In the diseases of girls before marriage it is rare that a digital examination is required. The appearance of these patients alone is almost sufficient to make a diagnosis; and a few supplementary questions, if truthfully answered, places it almost beyond a doubt. For this reason, it is better to instruct the mother to obtain the exact information on those points for us. The appearance of the girl's face, the color of her lips, the fact that her periods are scanty and pale in color, and that during the intermenstrual periods, she has a profuse discharge, tells us at once that she is suffering from anæmia. In that case, six weeks or two months of the administration of one or two of Bland's pills, three times a day before meals, will bring the color to her cheeks, arrest the leucorrhœa and make her periods more natural in quantity and quality. If, however, she is suffering from constipation, as nearly all of them are, this will not be sufficient, for in addition to the scantiness of the flow, you will find that she suffers pain with it due to congestion. In that case you must combine aloes with the iron, such as the pill ferri et aloes, one three times a day after meals, more or less according to the condition of the bowels. If the congestion is very great and the nervous system is in a weakened state, then a mixture containing 10 minims. of phosphoric acid, 10 of tincture of iron, and 10 of tincture

of nux vomica for each dose may be used to improve the appetite and tone up the circulation. But as this mixture is not laxative, some mild purgative must be given in conjunction with it until by regular habits the patient has acquired the ability to evacuate the bowels without medicinal aid. The occupation and habits of women, and especially of young women and school girls, deprives them of two important auxiliaries, namely, sunshine and fresh air. Unfortunately, there is no drug which can replace these necessities of life, so that the physician is justified in sacrificing studies, which after all are of secondary importance, in order that his patient may grow up robust. Too much education has a great deal to answer for in producing sickly girls and still more sickly wives.

When an examination of the pelvis is absolutely needed in young girls in order to determine the existence or absence of a pelvic tumor or a displacement of the uterus, then the rectum should be used for this purpose, as it is a serious matter even for a physician to commit what has been called a moral rape, if it can be avoided. In married women, of course, this does not hold true, for they generally know a good deal about their uterus and ovaries, and there is not the same danger of causing them to have what another authority has called, ovaries on the brain.

When an examination of the pelvis is necessary, it should be made thoroughly, and this cannot be done with the patient lying in the hollow of a bed. If possible, she should be induced to come to the office where an examination table or chair can be used. For that purpose, a common pine table such as is used in a kitchen, answers every need. It may be covered with a cushion or a folded blanket, and have a pillow for the head, but it is absolutely necessary that *it should be short*, so short that the patient will be compelled to make the pelvis project over the lower end, as a thorough examination cannot be made if she shrinks from you half way up the

table. For this reason it would be well to fix a piece of board across the top of it so that she could not get her head beyond the other end. The feet may hang from the end of the table and rest upon two chairs, or better still, a hardwood foot rest can be easily added on each side, which can be slid out a distance of one and a half feet, to rest the feet on; but I repeat again, a thorough examination of the pelvis can only be made when the patient's pelvis projects over the edge of the table. Neither need you expect to make a thorough examination with one finger only. Many abnormal growths in the pelvis are moveable and slide away from the finger, and thus elude detection, but with the other hand press gently but firmly upon the abdomen just above the brim of the pelvis until it meets the internal finger, when nothing of consequence can be there that would escape your notice. Two fingers in the vagina give much more information than one, and you will be surprised to see how little difference it makes to the patient. You not only can get farther up with them, but may often gently catch the cervix between the two and lift the uterus up towards the outside hand, thus determining its size and position, as well as the presence of pregnancy and fibroid growths. After having noticed the condition of the uterus, slide your fingers into the posterior cul de sac of Douglas, where an ovary may be felt—you will know whether it is an ovary or not by the sickening feeling which the woman will express on the slightest pressure of it. On moving the fingers forwards again on either side of the uterus, with the outside hand still pressing the abdomen down, you will feel the slightest abnormality in the broad ligaments, as also enlargements of the tubes, whether from hydro, pyo or hæmato salpinx or tubal foetation. In making such an examination it is well to keep up a constant conversation with the patient in order to distract her attention and thus relax the abdominal walls. If you cannot thus relax them, or she cannot do so voluntarily, then no examination

is complete, especially in stout subjects, without an anæsthetic. You will sometimes feel with the internal fingers a rough and nodular condition of the cervix, if the patient is 45 or 50 years of age; if the meno-pause has come some years before, and if your examination, gently conducted, causes bleeding, then you may be on the look out for cancer of the uterus. Without causing bleeding, you may find the cervix nodular and enlarged, and in putting your finger before and behind it, you will be able to hook it on the anterior and posterior lips, each offering the form of a trumpet mouth; and on drawing the anterior and posterior lip together with the two fingers, you will find that they can be approximated. This is evidence of a lacerated cervix, with cystic degeneration, owing to the prolonged exposure of the cervical glands, which were never meant to be exposed at all. This rolling out and exposure of the cervical mucous membrane used to be considered and treated as ulceration of the neck. On introducing a cuseo speculum the torn lips can be still further everted, and a stringy mucous may be seen extending up the canal. This is an evidence of endo-cervitis. Sometimes the lips of the cervix are enormously enlarged. In stabbing them to the depth of an eighth or a quarter of an inch an ounce or two of blood may be got to flow out of them. At the same time the diseased cysts are punctured and emptied of their acrid secretion. Tampons of cotton wool thoroughly saturated in glycerine containing 10 per cent. of boracic acid should be inserted by the aid of speculum and forceps three days a week for two months when all the redness and tenderness will have disappeared. The torn edges should then be united after the removal of the cicatricial tissue in the angle of the tear, according to Emmett's method. Let me now say a few words about the preparation of these tampons. Take a roll of absorbent cotton and divide it into 70 little cylinders a little longer than they are thick. Then tie a piece of linen thread eighteen inches long

around the centre of them, leaving the two ends about 8 inches long. When you have seventy of these tampons made dip them one by one into a pint of water containing 7 grains of sublimate, squeeze them out and hang them by the threads in a warm place free from dust to dry. Each tampon will then have one-tenth of a grain of bichloride. By coloring the liquid with aniline dye you will exactly know whether the tampons have been sublimated or not. These tampons are then packed rather firmly in gem jars or wide mouthed stoppered bottles and hot boroglyceride (10 parts of boracic acid diluted in 90 parts of glycerine) is poured over them until they are saturated. By applying one of these to the cervix 2 or 3 times a week and leaving it in for 48 hours congestion and tenderness of the pelvic organs may be immensely relieved in a month or six weeks. At the end of 48 hours the patient may withdraw it by the string left hanging from the vagina, and she may then give herself a vaginal douche two or three times a day before the next application. This matter of hot vaginal injections or douchings as it is called requires special directions. You tell a woman to syringe herself with hot water and what does she generally do? She will probably use a little two-dram glass ear syringe and perhaps refill it a few times, making in all about an ounce. I need hardly say that this is useless. To be effective douching must be performed as follows: The woman lies on a sofa or edge of the bed with a piece of oilcloth under her leading into a pail. The nozzle of the syringe is introduced backwards to the posterior vaginal fornix, and at least half a gallon of water as hot as the hand will bear is allowed to flow with some force. Care must be taken to plug up the centre hole of the nozzle as severe pain is sometimes caused by injecting water into the uterus. Unless specially instructed, women will generally take an injection while squatting over a basin; this method is inefficient, because the water runs out alongside of the syringe as fast as it

goes in without touching the uterus at all. As long as there is any acute inflammation, as evidenced by tenderness and heat, on digital examination and by the redness on passing the speculum, the cervix is not in a fit condition to be sewed. For this reason I have often been compelled to treat patients sent me from the country for three or four weeks before I could safely venture to sew up the lacerated cervix.

In cases of leucorrhœa not depending on anæmia or not improving under tonic iron treatment, the following I have found to rarely fail me:

Zinci sulph.

Plumbi acet., āā ʒj.

Mix and divide into four powders. Each powder to make one quart of injection. Use a teacupful as a vaginal injection three times a day.

In married women discharges of all kinds, not excepting gonorrhœa, will be speedily stopped by the application of a boroglyceride tampon every day or two. Even many cases in which there is a discharge of pus from the uterus are soon relieved by their use. In single women we had better depend upon injections.

Among other things which you may readily recognize by means of bimanual examination are the different abnormal positions and forms of the uterus. Only a few of these are of any importance; thus the uterus may be very high up, to one side or the other side, or it may be anteverted without producing any bad symptoms. It is only when it is retroverted, prolapsed or sharply bent on itself that it requires treatment. All these conditions are due to relaxation of the muscular fibres which should hold it up with very often increased weight to the organ itself; our first duty, therefore, is to diminish its weight by boroglyceride tampons, removing obstruction to its circulation, and our next to tone the relaxed organ up with good food, good air and strychnine. But the most effective treatment where there are no adhesions is the coarse wire faradism with

slow interruptions, the two poles being introduced into the uterus or merely into the vagina. This sets up thousands of contractions in the muscular fibres of the uterus and its ligaments, and so to speak puts them through a series of gymnastics. I have had a great many cases of relaxed condition of the pelvic organs completely cured by this means. When the uterus is bound down with adhesions, faradism will of course be useless. In this case I am in the habit of doing one of two things: either to gradually stretch these adhesions with the above tampons, placing in two or three or more each time, and occasionally painting the vaginal roof with tr. iodine, or else making one or two constant galvanic applications with a ball electrode in the vagina. By this means I seldom fail to stretch and absorb the adhesions and to restore the uterus to its normal position. Or else I perform hysterorrhaphy (or sewing of the uterus to the abdominal wall) in the following manner: I carefully wash and scrub the abdomen with soap and sublimate solution; I then make an incision in the median line as near to the pubis as I can without risking the bladder. I then introduce one or two fingers of the left hand into the abdominal cavity and seize the fundus, tearing it away from the adhesions, while an assistant pushes it towards me with a stout rod in the vagina. When it has been quite freed I seize it with a pair of bullet forceps near the fundus and hand them to another assistant to hold. I then with my scalpel make a number of cross scratches as in vaccination on the anterior surface of the fundus, and then pass a curved needle, threaded with silkworm gut, through the abdominal wall of one side, then through the anterior wall of the uterus, and then out through the other side of the abdominal wound. Three stitches are thus introduced at such a distance from the edge of the inversion that when they are drawn tight the abdominal wound is not only closed but also it is reinforced by the uterus behind it. I performed this operation twice last spring,

once on an Indian woman from Coughnawaga, sent to me by Dr. Patton of that place, in whom the uterus was hanging outside of her body and was bruised and bleeding from contact with her clothes. The pelvic floor was so relaxed that no pessary would have remained in. The operation only required twenty minutes, and was not followed by any pain or fever whatever. Her husband came to take her home on the 14th day, the stitches having been removed on the 10th day, but he declined to take a cab on account of the expense, and made her walk over a mile to the Bonaventure depot. I was anxious lest the new adhesions should have given away, but I have been informed by Dr. Patton, to whom I wrote to kindly examine her, that it was firmly attached behind the symphysis pubis. The other was a sad case of a single lady, sent to me by Dr. Brown, whose health and happiness had been wrecked and her life rendered wretched by prolapse of the left ovary, with retroversion of the uterus, the whole firmly adherent to the sacrum. I performed the same operation, but in addition removed the ovaries. I examined her a few days ago, nine months after the operation, and found the uterus still where I had sewed it; but it had become so atrophied that it was not larger than half the adult size. Both these patients are now in fairly good health.

I will reserve for a future communication some remarks on the early diagnosis of tumors of the uterus and appendages and the importance of early operation.

#### SIMPLE ULCER OF THE CORNEA: A CLINICAL STUDY FOR NON-SPECIALISTS.\*

By CASEY A. WOOD, C.M., M.D., Pathologist to the Illinois Charitable Eye and Ear Infirmary; Instructor in Ophthalmology Chicago Post-Graduate Medical School.

In a previous "Study" I endeavored to point out the characteristics of phlyctenular keratitis. Since the disease, in the later stages, is an ulceration of the cornea it

\* From the *North American Practitioner*, December, 1890.

might perhaps be classed under the above heading, but as it presents certain features which give it clinically a place by itself, it is usual not to include it in the category of corneal ulcers. Here is a case in point—a little boy aged 4, who has been complaining of his eyes for a month. He has a single, small, circumscribed ulcer occupying the lower-outer quadrant of the left cornea. Its edges and bottom are gray and infiltrated, and there is a prolongation of the infiltration outwards towards the periphery of the cornea. He has a sero-mucous discharge from his left nostril and his upper lip and left side of the face are swollen and dotted over with eczematous pustules. Most observers glancing at him would say, at first sight, that he has phlyctenular keratitis. On the other hand he has not and never has had marked photophobia, but sits upright and stares about the room. It is evident that he has not had that blepharospasm which leads the child with phlyctenular disease to bury his face on his mother's shoulder or to hide himself in some dark corner away from the light. Again, he has no traces of eczema behind the ears, at the corners of the mouth or about the alae nasi—as is often the case in true phlyctenular keratitis. The pustular eruptions on the face are the result of irritation produced by the continual discharge of tears over the cheek. In this respect and in the discharge from the nose the case does resemble the conditions present in corneal phlyctenulae.

Using parallel columns one might contrast phlyctenular ulcer with the simple form.

<i>Phlyctenular Keratitis.</i>		<i>Simple Ulcer.</i>
Results of bursting of a corneal pustule.	Pathology.	{ Infection of a corneal scratch or other wound.
Poor.	Health of patient.	Maybe very good.
Disease of childhood.	Age.	{ Usually found in adults.
Almost always multiple.	Number.	{ Almost always single
Very marked.	Photophobia and spasms of the lids	{ Often not marked.
Usually present about head and face.	Eczema.	{ Usually absent.
Begins as a pustule.	Origin.	An ulcer <i>ab initio</i> .

But it does not often happen that we are

called upon to differentiate the solitary phlyctenula from the simple ulcer occurring in a child. Indeed the latter will almost invariably be found in *men* who pursue an active outside life. The genesis of the disease depends upon this, for in the majority of instances an ulcerated cornea begins by the removal of the protecting epithelium. This is followed by infection of the denuded spot by micro-organisms. These multiply and form a nest, whose sides and bottom are those of the ulcer. Abrasions of the cornea occur frequently with most of us and unless infection follows the trauma it is soon forgotten. Every time a foreign body enters the conjunctival sac every time a grain of coal, a speck of dust, or a piece of metal "gets into the eye" it may scratch the corneal epithelium and expose the individual to the discomfort and dangers of ulcer. If the person injured in this slight and insignificant manner have any purulent discharge about his person, if he be a sufferer from certain germ supplying affections in the immediate vicinity of the wound (such, for example, as blepharitis marginalis, the various forms of conjunctivitis, trachoma, nasal diseases, particularly ozaena, etc.) inoculation of the wound may follow and an ulcer form. Or he may convey to the abrasion from a soiled handkerchief, or from his hands some of those organisms that supply infection in other suppurations. Finally germs may float in from the air or they may be imported by the agent that first inflicted the wound.

*Simple Ulcer* of the cornea, then, as opposed to the virulent spreading variety, may be described as a small, generally single, generally central lesion with infiltrated edges and of a grayish white appearance. It does not tend to spread to any extent although the infiltration of its edges may become more evident. There is always more or less pericorneal congestion, though in some cases, where the ulcer is indolent, this sign may not be very well marked. We have a typical case here, a laborer, aged 28, who was injured a few weeks ago by

getting some sand into his right eye. I have reason to know that his surroundings are not the most sanitary in the world and I am therefore not surprised to learn that the abraded cornea did not heal up, but shortly after the hurt developed a superficial but central ulcer. In other words he has infected the primary corneal wound. His vision is now 6-18, or  $\frac{1}{3}$  of normal; he complains of some pain in the eye and he is unable to do his work. There is also considerable true photophobia, some pericorneal injection and a good deal of lachrymation. The ulcer presents the appearance of a rather dense central opacity, whose edges, translucent and grayish, gradually fade off into the transparent cornea. A close examination shows that the excavation made by the ulcer is a comparatively small and shallow one, and that its nebulous

edges are not produced by destruction of the overlying epithelium but are the result of an infiltration of tissue changes going on underneath the epithelial layer. Asking the patient to stand before the window in a half light we notice that when the bright image of its cross bars falls upon the centre of the cornea it is distorted or broken in one small and central spot only—indicating the whereabouts of the loss of substance. Outside of that the corneal epithelium presents an unbroken surface to the window image. The opacity surrounding the ulcer must be due to some change that underlies the epithelial layers of the cornea.

The following pictures will indicate what really does occur, and what the meaning of the infiltration is.

Figure 1 shows a vertical section of an

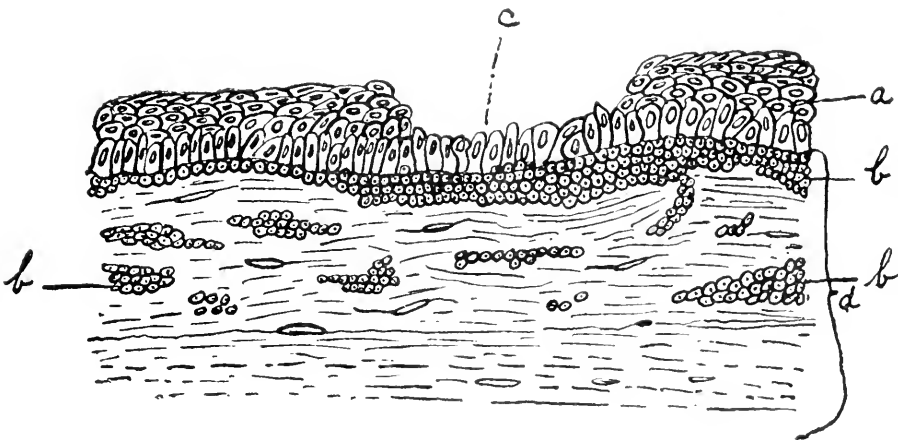


Figure 1. First stage of Corneal Ulcer.

a. Epithelial layer.  
c. A defect in it.

b. Collections of infiltrating round cells.  
d. Substantia propria.

ulcer in its earliest stage. Inoculation has occurred at *c* (where the epithelium has been removed), and the anterior elastic lamina has been destroyed, and its place taken by migrated round cells such as one observes in most inflammatory processes. Isolated collections of wandering cells (as at *b*) occupy various situations in the neighborhood, and add to the opaque appearance of the cornea. In both our patients it is the congested vessels which have supplied these wandering leucocytes. Later on it

will be seen that, when under the influence of proper remedies, repair begins, these same vessels give off (new formed) branches which extend into the true substance of the cornea, and act as carriers of material whereby the corneal excavation is filled up.

In the second stage (see fig. 2), the entire epithelial layer is removed, and a free communication is established between the ulcerated portion and its surrounding collection of leucocytes. The ulcer is now filled with corneal debris, cellular masses, germs

and the products of the latter. The true substance of the cornea is invaded and the infiltration may extend half way through the thickness of the substantia propria. For several weeks this state of things may remain substantially unchanged, the remedies applied or the vitality of the tissues, or both forces working together, retarding the progress of the disease.

No new deposits of leucocytes are form-

ed. The active germs do not increase in numbers, and finally repair sets in. When that begins the peri-corneal blood vessels, whose capillaries apparently ended at the limbus, project small delicate processes into the substance of the cornea towards the ulcerated spot and repair goes on here pretty much as it does in other situations, with much the same results. This third stage is represented in Fig. 3.

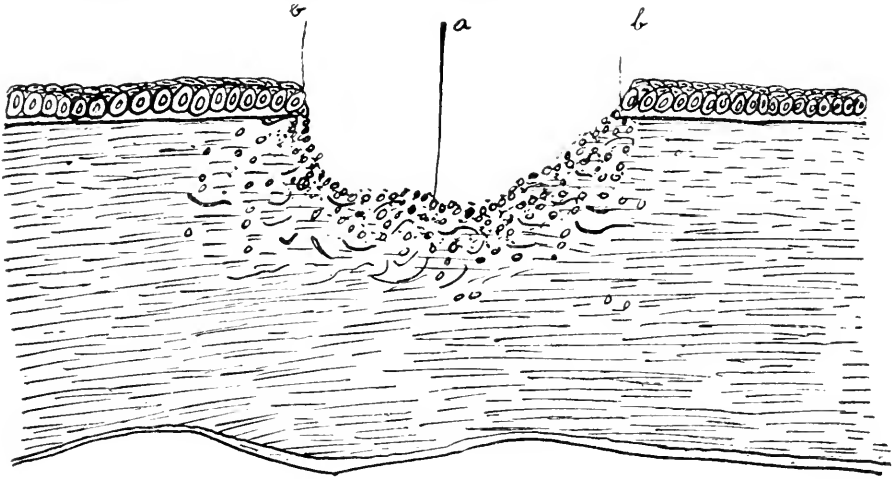


Figure 2. Second stage of simple corneal ulcer. The edges of the ulcer are at *b b*, where the epithelium and anterior elastic lamina end. The bottom of the excavation, *a*, is covered with tissue debris.

The outlying collections of round cells have been absorbed into the corneal lymphatic spaces whose contents finally empty into the pre-auricular lymph stream. When repair is complete (as in Fig. 4), the new vessels disappear and the *hiatus corneae* is filled by connective tissue. In other words the sub-epithelial layer (of Bowman)

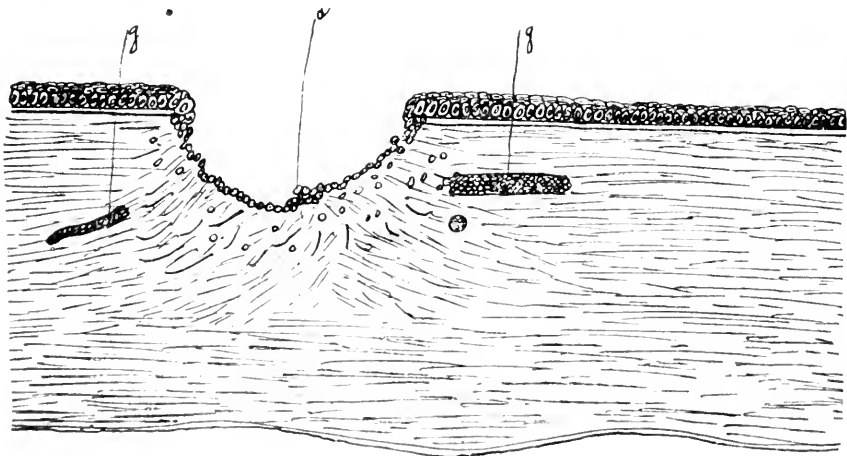


Figure 3. (After Saemisch.) Section of corneal ulcer. Beginning repair. The proliferating epithelium has covered the bottom of the ulcer *a*. New blood vessels have been cut through at *p*.



and the *substantia propria* once destroyed are not (in adults at least) regenerated. Their place is taken by a lower order of tissue and a true cicatrix is formed.

Otherwise is it, however, with the corneal epithelium. That is renewed by proliferation from the unaffected epithelium covering the edges of the ulcer (see Fig. 4), and so one observes, after healing of these lesions, a smooth surface, reflecting an unbroken "window image" even though the underlying scar tissue be abundant. As seen in figure 4 also, the new formed epithelium is more abundant than normal and sends processes into the cicatricial tissue beneath.

*Treatment.* It is very important that the simple ulcer should be efficiently treated as soon as possible so as to prevent or limit the damage which, when central, it often causes to vision. As before stated central scars, in adults especially, even when hardly

perceptible to the naked eye, may seriously lower the visual acuity. Two things are particularly desirable. 1st. That the infecting centre with its ramifications should be destroyed or removed, and, 2nd, that the healing of the ulcer should be promoted. There are several ways of attaining the former end. One may, as Noyes suggests, scrape out the little pocket of yellowish pus and germs with a spud, such as is used to remove foreign bodies from the eye. Or a small drop of a 10 per cent. solution of silver nitrate may, by means of a probe, be conveyed and accurately applied to the ulcer only. It should be allowed to remain for half a minute, after which a solution of salt (5 per cent.) kept ready for the purpose is used to wash it away. Great care should be observed that only a very small quantity is used, just enough to fill up or cover the ulcer. Another good plan is to whittle one end of a match to about one-

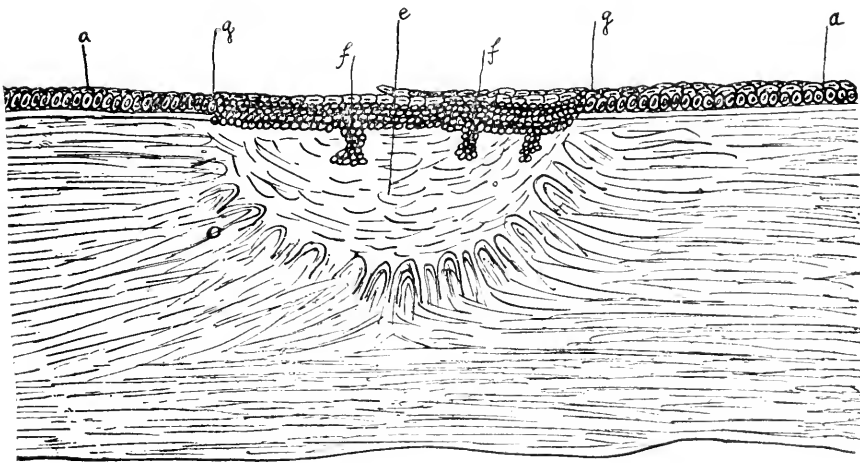


Figure 4. (Saemisch.) Cicatrized corneal ulcer. *a*, Epithelial layer. *g*, Edges of ulcer. *c*, Cicatricial tissue. The marginal epithelium has covered the scar, even (as at *f*) extended into its substance.

half its usual size, and having soaked it thoroughly in strong carbolic acid (95 per cent.) apply the medicated end several times to the ulcer until the part is quite white. Instead of strong carbolic acid a saturated solution of resorcin, applied like it, is effective.

Some surgeons prefer the electro-cautery

in these cases, but I think it produces too much scarring, and *unless the ulceration spreads*, as it rarely does in the simple form, is uncalled for. It is like taking a shotgun to kill a butterfly.

All these applications should be preceded by the instillation of cocaine—2.5 per cent. solution.

In any event the subsequent treatment will be about the same. It consists chiefly in bathing the eye thoroughly with hot water every 3 or 4 hours and putting in a few drops of a saturated solution of boracic acid to which some mercuric chloride (1:5000) has been added. Have the patient wear a close fitting patch or shield, under which, when it is windy or dusty, a piece of clean borated cotton is placed, but do not allow any bandage or handkerchief to cover the eye and retain decomposing discharges. Then, twice a day he should drop into his eye a couple of drops of a 1 per cent. solution of atropine. On bright days a pair of colored glasses will be needed to relieve the sympathetic photophobia which usually affects the sound eye.

It has been observed that certain cases, as yet ill defined, do not progress favorably under atropine. In such instances sulphate of eserine (0.25 per cent.) in a saturated boric acid solution should be substituted.

One may be sure that everything is going on well when the ulcer or its surrounding gray infiltration does not spread. The latter should disappear in a week or ten days, and soon new vessels (of repair) run out to the rim of the ulcer from the edge of the cornea. The pain, photophobia and lachrymation should grow gradually less until finally they disappear altogether; the ulcer fills up and leaves, let us hope, an inconspicuous and harmless scar.

It goes without saying that any blepharitis, ophthalmia, ozena, or other infecting disease about the face should be cured. In the same way the patient should be warned never to wipe his eyes with his fingers, or to use anything but a virgin pocket handkerchief. Pieces of aseptic cotton wool are, however, best of all for eye wiping.

Finally, do not forget the rest of the organism, but see that the general status is not below par and that the patient has good food and healthy surroundings. Better put him into a hospital than allow him to reside in an ill-ventilated, ill-drained and germ-saturated house.

204 Dearborn street, Chicago.

## Correspondence.

### OUR BERLIN LETTER.

BERLIN, December 17, 1890.

(From our own Correspondent.)

Editor CANADA MEDICAL RECORD.

DEAR EDITOR,—Before coming to this city I spent about two weeks in London studying the effects of the Koch lymph at the hospitals which had procured the remedy. These hospitals were four in number, and I will give you a brief outline of the work and its results at each during the short time the treatment had been administered in London.

*1st. King's College Hospital.*—Here in the clinic of Mr. Watson Cheynne the largest number of injections of the lymph had been given, and to one who had watched the progress of the cases under treatment from time to time it seems incredible that the wonderful efficacy of the cure, in cases of lupus particularly, could be doubted. Lupus, which had been diagnosed as such by London's greatest surgeons, were sent to Mr. Cheynne for treatment by this remedy. The effect of the first injection, or perhaps the second, was readily seen, although certainly this effect was not invariable. Yet in the majority of cases the benefit was beyond all doubt. One could notice what was formerly an intensely congested lupoid tissue gradually lose its deep red color, becoming paler and crusting over with yellowish-white thick scales. These scales were shed, and in time the tissue beneath became cicatricial in appearance. In some lupus cases, it is true, this remarkable benefit was not apparent, but in a general way few cases of this disease were not appreciably benefited. Local tubercular conditions such as those of the ankle, knee and hip-joint, did not during the time treatment had been given, show strikingly good results, although Mr. Cheynne was sanguine regarding the future even in these cases. One case of enormously swollen, inflamed and suppurating strumous glands, with burrowing sinuses in the neck extending from ear to ear, together with the same state of things in one hand, was benefited by two (2) injections to a degree that would have excited the enthusiasm of the most skeptical. In eight days the hand was as free from disease as the other, only cicatrices remaining, while the state of the neck was improved at least fifty per cent. Even with this benefit, the patient, a young woman, refused to accept further doses of the remedy owing to the suffering she underwent due to the very great reaction in her case. Mr. Cheynne told me she had been almost in a state of collapse during the intensity

of the resulting fever. One case of an infant, 18 mos., with a fluctuating swelling of knee joint, which was injected with a dose of ( $1\frac{1}{2}$ ) one and a half milligrams showed good reaction and marked diminution of the swelling, but the future only could demonstrate any permanent benefit. In hip-joint disease no definite results have been noticed worth mentioning.

2nd. *City of London Hospital for Consumption*.—Dr. Herron gave the injections at this institution, with results of which the following is a summary. To begin with, I may say that this physician was the most cautious man that I have yet seen apply this powerful remedy. It is true, owing to this fact his results were somewhat tiresome, inasmuch as he had to inject from time to time without reaction until he reached the dose to which the patient was susceptible, and this was only done with safety by gradually increasing his doses. In cases of phthisis pulmonalis this is Koch's own method, and the only treatment admissible in my opinion to a conscientious man in handling a remedy so potent. Owing mainly to this precaution I did not see in London results of this treatment which I have already seen here—I mean in regard to undesirable sequelæ, such as lighting up a circumscribed pneumonia or a pleuritis the direct result of the lymph. Reaction producing these results would preclude further treatment until the subsidence of irritative symptoms, and then would be followed by diminished doses. Sometimes instead of high or moderate fever following, as a result of the remedy, the temperature would dip below the normal as much as a couple of degrees. This phenomenon Dr. Herron could not explain any more than he could explain the variety of exanthemata concurrently appearing while the reaction took place and lasting beyond it. In any case the rule is never to repeat an injection until temperature has reached the normal line again in phthisis pulmonalis. A practical point is in opening a new bottle of lymph invariably to begin again with the minimum dose, as Dr. Herron suggested the possibility of a varying strength in the fluid, and this precaution would decide any question about it. Without selecting any special cases from my note book, I can say that in a great many instances where no large cavities existed the physical signs cleared up very much and a general feeling of well-being was experienced after the reaction passed off. The slight loss in weight in some instances was followed by marked increase even upon an ordinary diet. In this hospital up to date nearly every case of night sweating had been benefited. I might say there was only one exception. In every case the urine was watched for any sign of renal complication, but with the exception of a slight opalescence in a few instances no result happened of consequence. Cases of phthisis where large cavities existed in the lungs were

not treated by the Koch method. They were looked on as incapable of sustaining the reaction. The temperature ranged from a dangerous height to a dangerous depression, and sometimes called for measures suitable to regulate these extremes. A case of anemia, thought to be non-tubercular, was injected with a full dose, viz., 1 centigram, to find what effect would follow in this condition. Much to the surprise of all a general reaction followed with its train of symptoms, and local swelling of knee joints showed itself, proving the presence of tubercular tissue in the individual which previously had given no evidence of existence.

3rd. *London Throat Hospital* (Sir Morel McKenzie's).—Although the out patient practice at this hospital is great and the chief surgeon the most famous of English throat surgeons, yet the indoor facilities are very restricted, owing to the small building occupied, and consequently the number of patients treated by the Koch remedy is small, this treatment being essentially an indoor one, at least in the beginning. A very interesting case of a boy who had been operated on for adenoma glottidis by tracheotomy to relieve tubercular laryngeal infiltration, was put on Koch's remedy. I fortunately arrived in London just in time to see the first work of the kind done here, so that the study of reaction in this case was carried out from the beginning. On comparing the condition of the throat after two injections with the condition previously, the subsidence of general inflammation was most marked, and the boy claimed that he was cured. One very bad case of nasal and laryngeal lupus was not only improved in the general symptoms, but the intense redness of the tissue affected was very plainly diminished. Another case of this disease where the amount of tissue affected was small had almost entirely healed in a week. A few cases of lung tubercle not seriously advanced were also treated here with evidence of benefit. But in some cases the benefit was to my mind greatly assisted by imagination. The patients in many cases were intelligent and would in describing their symptoms remember that the wonderful Koch remedy, which they knew to be the talk of nearly all creation, must have done them good whether they felt it or not, and so their statements were largely biased. One case of cavity in left lung was not improved during the time I was in London: in fact he claimed his night sweats were worse, and he was weaker generally.

4th. *Brompton Consumption Hospital*.—The work done here by Dr. Theodore Williams was only started, so that no satisfactory data were recorded.

The whole work done in London had not been of sufficiently long duration to afford any reliable evidence of virtue in the remedy as a cure of a positive kind for tuberculosis. That many instances showed reaction resulting in decided and

positive benefit could be no more doubted than that many gave evidence of the reverse effect, but I admit that the latter were cases well advanced with cavities. The amount of misery caused by the reaction was bitterly complained of in many cases, and even amongst paupers positive refusal to allow further injections were made. Those who have watched the many hours of suffering through which a patient passes can sympathise with these objections. A condition of fever quickly advancing to a hyperpyrexia with a pulse of 140 to 160 a minute, pains in every part of the body, severe frontal headache, rigors, localized acute pain, as in resulting pleuritis, in some cases severe exanthemata, formication, paresis and other symptoms of a distressing kind, of a variety incredibly great, are what one notes during treatment. The remarkably successful results in some cases are what saves the remedy from banishment. At the height of crisis in reaction the sounds of pneumonic crepitation occasionally appear, with decided dull percussion note over an area where no such symptoms had previously existed, and which if they had could not have been overlooked. Happily these signs with all, or mostly all, of the others lighted up by the reaction resolve themselves and disappear on subsidence of the fever. This crepitation was thought to be a counter-part inside the chest of the action of this remedy on lupoid tissue external to it. That inasmuch as a halo of red extends beyond the lupus, with oedema and some obstruction to the circulation, so in the lung we have oedema lighted up around the tubercular deposits producing the signs mentioned.

Experience so far has established certain rules regulating the injections where the action is not only better tolerated but the physician kept less on the outlook for untoward results. I venture to say that the use of this remedy in practice, hospital or private, will be a most troublesome one to the physician unless in every case the nurses are of the most reliable character and capable of quieting the impatience of a sufferer while undergoing the miseries of reaction. In the children's ward of King's College Hospital I could pick out every child that had been injected from amongst others by listening to their cough. I have seen distressing cough last for almost an entire night as a result of injection. With very young children this is most frequently seen and passes off in a few hours generally.

When the injections cause no reaction the patients may be allowed to call at the physician's office, and receive his hypodermic, returning from time to time for another injection as the circumstances warrant or require, the object being to retain the system under the influence of the remedy. This procedure applies, however, more to lupus than tubercle. The oldest case of treatment of tubercle by the Koch remedy in Berlin Charité Hospital only

dates back to 4th October, and thus as yet any standard for prolonged treatment has not been established; in fact the entire question is in its experimental stage still, in many respects. At the same time a satisfactory study of the many thousands of injections made and a knowledge of results can only be obtained on this side of the Atlantic at the present time, and I may add Berlin is the place to come to if one is familiar with the language. Let me suggest to physicians intending to study this subject in Germany that unless they can appreciate lectures in German their time will be wasted here just now. Thus far the number of Englishmen studying the subject is not enough to warrant forming classes conducted in the English tongue. Demonstrations are given in every hospital and clinic only in German, and on this account some American M.D.'s who realized what I indicate have gone to London where they will acquire more light on the subject of this treatment. If any clinics are given in English I have not heard of them, but later no doubt English classes will be formed in this as in the other older subjects of study in Berlin. During the space of a few weeks one can study here amongst so many cases all the infinite variety of symptoms that arise under this treatment, and so gain an experience which one's personal administration of the lymph at home would not develop for a long time. The simple acquisition of the remedy, I would remind my medical friends, enables one to begin experimenting only, and to begin what was begun here some months ago. It is true the newspapers and medical journals have recorded the results here with much industry, but as is well recognized in other departments of medicine nothing but actual bedside experience can render a man competent to handle creditably so powerful a remedy and enable one to assure and satisfy anxious patients and their friends of what experience has shown in Europe the probable outcome will be. It is true that considered from a general standpoint the field here is only yet experimental, but three months constant use of the lymph amongst so many thousand cases would be the equivalent in result of as many years in Canadian hospitals.

A review of the work done here in the Charité Hospital, in the clinics of Von Bergmann, Gerhard, Leu, &c., the polyclinics of Prof. Krause, Dr. Cornet, &c., I hope to send you next week. The last named gentleman is Koch's chief associate. Meantime I congratulate Montreal on getting some of the lymph.

G. T. Ross.

Hot claret is said to be an excellent gargle in Acute Sore Throat, being an agreeable astringent and non-poisonous.

## Progress of Science.

### TREATMENT OF ACUTE AND GONORRHOICAL RHEUMATISM BY PHENACETIN IN LARGE DOSES.

Rifat, (*Bulletin Général de Théraputique*, May 15th) reports the results of recent experimentation with phenacetin in rheumatism, both acute and blennorrhagic. He has treated sixteen cases; in three of these all the joints were swollen and painful. In the three grave cases, which were attended with a very high fever, he was obliged to give large doses, fifteen grains every three hours day and night. In six of the cases he gave the fifteen grain dose only every four hours.

There is, he says, extreme tolerance by the stomach of phenacetin (an advantage which it has over antipyrine). It is well to begin treatment by giving only forty-five grains a day, that is, fifteen grains every three hours till three doses are taken. This dosage is, however, insufficient in rheumatic polyarthritis. Where he begins with three grammes (forty-five grains) *per diem*, he increases by one gramme (fifteen grains) a day till the pain has ceased, and the movements of the joints are restored. Ordinarily by the fourth day, when the daily dosage of six grammes (ninety grains) is reached, there will be noticed disappearance of the pain, freedom of movements, and absence of heat and swelling about the joints.

The maximum dosage, which is determined by the state of amelioration of the patient, is continued during the three following days—exceptionally, for a week; then the doses are gradually decreased by one gramme a day till the quantity of three grammes *per diem* is reached, and the medicine is continued in that daily amount for a week, when it can generally be discontinued.

In very severe cases it is necessary to continue the augmentation of doses till the fifth day, when the daily quantity has attained eight grammes (two drachms).

The treatment as above described, demands, in cases of average intensity, seventeen days; in grave cases, twenty-one days. It will thus be seen that the mean duration of grave cases does not exceed twenty-one days. If we compare these results with those obtained by Guttman with salicylic acid, whose mean duration was thirty-five days, and with antipyrin which gave a mean of twenty-five days, we see that phenacetin administered in the manner above described, appears to be the remedy to which preference should be accorded.

As for the secondary effects engendered by these large doses of the drug, Rifat sums them up as follows:

In patients treated by phenacetin, there may

be observed three sorts of phenomena imputable to the secondary action of this medicament, and which are: (1) profuse sweating; (2) cyanosis; (3) uræmic accidents.

Abundant sweats, especially in cases complicated with high temperature, are the rule; these are due to the hyperthermia, and when once the temperature falls to the normal, the sweating subsides. The sweats are wanting in apyretic rheumatism, and when they occur in the febrile form, they do not contraindicate the continuance of the medicine, whether this be phenacetin, antipyrine, or salicylate of soda. There is less liability to cardiac or other visceral complication when the remedy is pushed.

Cyanosis is a rare accompaniment of the administration of phenacetin. Rifat has not seen it in any of his rheumatic patients; in fact, he has never witnessed it but once, namely, in a case of typhoid fever.

Uræmic accidents are also very infrequent. They have, now and then, been witnessed in rheumatic patients with arterio-sclerosis and contracted kidneys as the result of suppression of the urinary excretion by the administration of phenacetin. Hence, it would be necessary when giving this remedy in large doses to nephritic patients to have surveillance of the renal functions, and to suspend the medicine if uræmic symptoms should appear.

Relapses are not very frequent, if the physician takes the precaution to continue the phenacetin after the method above indicated. If, however, the remedy be too early suspended, a relapse will be almost certain to follow. The same result has been noticed when salicylic acid or antipyrine has been given.

As regards blennorrhagic rheumatism, Rifat concludes, from an observation of three aggravated cases, that, in cases where salicylate of sodium has completely failed, phenacetin may have a real curative action. This disease is often most intractable, being the opprobrium and despair of the physician; though its pathogeny is doubtless widely different from that of acute rheumatism, yet in the cases reported by Rifat, phenacetin gradually pushed to six and eight grammes a day (certain auxilliary local measures, as compression being also employed) gave most satisfactory results, the pain and swelling rapidly subsiding, sleep and the power of movement returning. Unfortunately, three cases is too small a number to warrant a definite conclusion.—*Boston Med. and Sur. Journal.*

### HEADACHES.

The treatment of headaches of young children brings us into an almost special line of cases. In the city of New York, at least, these headaches are best treated, as a rule, by giving small doses of the iodide of iron, or of the citrate of iron and quinine. In school children, head-

aches have often to be treated by removal from school, the use of tonics, change of diet, and the application of glasses suitable to any eye-defects that may be present. But glasses should be the last thing tried, unless the visual trouble is very marked. In some children, arsenic acts well.

Headaches among brain-workers require, as a rule, a different class of remedies from those among muscle workers. In the former class, nervines, like antipyrin, caffeine, and the bromides, act well; while attention to diet, exercise, and the eyes is especially required. Among the laboring classes, especially women, anaemia, malaria, syphilis, and rheumatic influences must often be attended to. Among the best of symptomatic remedies is muriate of ammonium in large doses,  $\frac{1}{2}$  to 1 drachm, given in wafers. In the headache of neurasthenia, menthol, 5 grains in hot water, gives relief, or a combination of menthol, 5 to 10 grains, and antifebrin, in 5 to 10 grains. Phenacetin is also a good remedy. A practical point of importance in the use of antipyrin is the dosage. Often the best results are obtained by small doses frequently repeated. The much-advertised effervescent preparations for headache contain too small a dose of caffeine or of bromide to be of the best service. Of local applications, a spray or lotion of aconita, sheet lint soaked in 20 per cent. solution of menthol and wrapped on the head, solutions of cyanide of potash after the method of Trouseau, and Rithet's tobacco and quinine snuff, are some of the measures indicated.

Every one meets now and then with cases of headache of obscure origin, obstinate in character, and intractable to every kind of treatment. The use of iodide of potassium and of the strong galvanic current and static electricity has been of service to Dana in some such cases.—HUX, *Annals of Universal Medical Sciences*.—*Lancet-Clinic*.

## THE CHEMISTRY OF GOUT.

When the microscope first unfolded the marvels of tissue structure to the gaze of the greedy seeker after knowledge, it was assumed that at last the secrets of nature were about to be unravelled, and that the finding of the appropriate remedies would be but a matter of time. Disappointment, however, has followed this department of research, and now that the microscopy of the tissues, normal and abnormal, has almost said its last word, we still seem as far from arriving at an explanation of the fundamental changes underlying many of what we are pleased to call diatheses, as were our forefathers. The microscope shows us the effects, while our object is to ascertain the cause, or at any rate the process of the phenomena. There is fortunately reason to hope that the prevailing obscurity may be dissipated by a better comprehension of physiological chemistry, a branch of study which calls for

peculiar qualities of mind and training. Of this we can recall no better example than the advances effected in the study of the chemistry of gout, a protean disorder the manifestation of which, thanks to Sir Alfred Garrod, we now know to be dependent upon, or at any rate to be associated with, some interference with or deficiency in the metabolic changes which take place in the organism, resulting in the presence of an excess of uric acid in the blood. The immediate determining cause of this excess of acid still eludes investigation, but there have recently been made known some observations of exceeding importance in regard to the behavior of acid in the blood and tissues under varying conditions of environment, throwing light upon the relationship of the excess of acid to the pathogenomic morbid phenomena of gout. It has been known as a matter of clinical experience that alkalies favor the elimination of uric acid from the system, while acids, on the contrary, diminish it.

The paper read by Sir Wm. Roberts before the Royal Medical and Chirurgical Society affords a scientific explanation of some of the points alluded to, and paves the way to further discoveries. As we have already stated in a previous article, this observer has demonstrated that uric acid in the blood exists in the form of a soluble quadrate. Under certain circumstances, especially if the alkalinity of the blood be lessened, or the excretion of the quadrate by the kidneys be unduly delayed, the salt combines with the sodium carbonate in the blood and forms biurate of sodium, a salt which is remarkably and persistently insoluble in blood serum. Synovia is less alkaline than the blood, and it is suggested that this fact may account for the deposition of the crystals of biurate in the joints, where they set up the local inflammation which characterizes the disease. The immediate effect of this disposition is to clear the blood to some extent of its superfluous acid, and this is quite consistent with the clinical phenomena observed after an attack of gout. When uric acid is treated with an alkaline solution outside the body, it is taken up as a quadrate. There, as in the body, it undergoes a process of what Sir Wm. Roberts calls "maturation;" and then, ultimately, suddenly breaks up into the biurate of precipitates. Direct observation on the behavior of uric acid in the laboratory shows that, *ceteris paribus*, precipitation earlier in synovia than in blood tissues, and this supports the hypothesis of the reason why the deposit takes place preferably in the joints. While, however, the stage of solution was hastened by increased alkalinity of the medium, no appreciable effect in retarding the period of maturation and precipitation was produced, and the addition of salts of sodium notably hastened these processes. The addition of salts of potassium, lithium or magnesium did not appear to have

any effect in either direction, with the exception of chloride of potassium, which seemed to prolong the period of maturation. The most important factor in determining the duration of the period of maturation was shown to be the proportion of uric acid present in the solution. The biurate is absolutely insoluble in alkaline media, and its solubility increases as the proportion of saline matter in the medium decreases. This perhaps explains how the "water cure" acts in clearing the system of its surplus acid. At the same time the paper inculcates the necessity for caution in the use of alkaline waters, which, if administered when the blood is charged with uric acid, may, by favoring the formation of the insoluble biurate, precipitate an attack of gout. Taken earlier, when there is still, so to speak, a margin of solubility, the alkaline may facilitate the conversion of the uric acid as it is formed into the soluble quadrate, thence to be eliminated by the kidneys if these organs are in good working order. The beneficial effects of alkalies would thus seem to be dependent upon prompt elimination of the uric acid, and an ample supply of liquids may aid this taking place. We may note *en passant* that the urates of iron and lead are extremely insoluble. We are probably only on the fringe of this important and recondite problem, for Sir Wm. Roberts hinted at the existence of a colloid form of the biurate, the sudden conversion of which into the crystalline form might account for the onset of an "attack."—*Med. Press and Circular*. ~~*Lancet-Chronic*~~

### SALICYLIC ACID IN DERMATOLOGY.

The germicide properties of this well-known agent have been carefully determined. Sternberg found that a pure micrococcus in active growth was destroyed by a 2 per cent. solution of the acid, and that the bacterium termo was killed by a like solution. As unusual skill and care is needed for the preparation of the pure acid, many samples to be had from druggists are unsatisfactory in their action upon the skin, chiefly on account of the presence of carbolic acid.

The action of pure salicylic acid upon the skin is quite peculiar. When a plaster or ointment containing from 38 to 50 per cent. of salicylic acid has been applied, the epidermis beneath it becomes gradually white and soft, so that it may be scraped off with the back of a knife. A reddened oozing surface is exposed, upon which, by the aid of a lens, the papillæ, rich in vessels and nerves, may be seen, projecting like so many carrots planted irregularly, with their roots up. Very little or no dermatitis is excited in the parts surrounding the application, except in cases of peculiar idiosyncrasy.

In the *Johns Hopkins Hospital Bulletin*, April, 1890, Dr. Morrison calls attention to these facts concerning salicylic acid, and mentions

certain cases in which he has found it of value. He first saw it used at a clinic at Prague in 1882, and found it in respect to cleanliness to greatly surpass and in efficiency to equal the ill-smelling tar preparations of the Vienna clinics. He uses it now quite extensively in his practice.

It is a good remedy for freckles and other pigmentations, as it readily removes these blemishes, and, in his experience, never of itself causes deposit of pigment. Through its germicide properties it quickly destroys the growths of tinea versicolor and ringworm. A case of chronic and very obstinate ringworm of the face and arm is cited, in which each spot was washed for five minutes with *sapo viridis* and warm water, and then covered with a solution of bichloride 15 grains and salicylic acid 60 grains in an ounce of collodion. There was intense pain and slight blistering, but no further application was required except lanolin containing 5 per cent. of salicylic acid. The cure was very remarkable.

Chronic eczema yields rapidly to the stronger salicylic acid preparations. In one case, a healthy man of forty-five years consulted him concerning a chronic squamous eczema of the wrist and palm. It worried the patient very much, especially when he became warm in bed, and had for two years resisted all treatment. A 38 per cent. salicylic acid plaster was applied and fastened tightly to the affected parts by means of a bandage. As the skin was not much affected after twenty-four hours, a fresh plaster was put on. This application, unlike the former one, caused intense pain, and upon its removal next day the epidermis was found to be soft and white. Without disturbance of the dead epidermis, a 50 per cent. ointment of salicylic acid in lanolin was rubbed in frequently and kept on by gloves. In from seven to ten days complete cure was produced. The patient was discharged, with orders to rub a little of the 5 per cent. ointment on the parts which had been diseased every time he washed with soap and water.

The salicylic acid treatment is of great value in psoriasis of long standing. A case is related in which a man had suffered for twenty years from psoriasis numulata et orbicularis, having large spots on the forehead and on both sides of the nose. *Sapo viridis* and hot water were used to remove the scales, and an ointment containing 60 grains of salicylic acid to the ounce of lanolin was rubbed into the affected skin. In a week considerable improvement was noticed, and at the end of a month only a slight discoloration could be observed on the face, which had once been greatly disfigured, and the lesions on the other parts of the body were also disappearing.

Salicylic acid may be applied in several different ways. It is only slightly soluble in water, but dissolves more readily in this liquid when sodium biborate is added. When it is desirable to apply it in powder to the skin, Dr. Morrison

prefers to make a saturated solution in alcohol, which dissolves it readily, and to allow the alcohol to evaporate leaving the acid behind in the form of a very finely divided powder. Unna rubs the powdered salicylic acid up with gelatine and glycerine, no solution being formed, but a useful mixture. Ointments of various strengths may be similarly prepared with lanolin. Unna has prepared plasters containing from 5 to 50 per cent. of salicylic acid, which have rubber backs and stick well to the skin.—*Maryland Medical Journal*.

### PYOKTANIN.

This new antiseptic, of the coal-tar or aniline series, is presented by its discoverer, Prof. J. Stilling, of Strasbourg University, as a true but harmless therapeutical disinfectant; that is, an absolutely sure and yet perfectly safe bactericide, eminently adapted for permeation through animal tissues and fluids in the living body. There are two varieties of this substance, blue and yellow pyoktanin, the former of which is the stronger. The different forms in which this substance is presented for use are as follow:—

1. Pure pyoktanin, in divided powders, is used on the surfaces of large purulent wounds and ulcers, until a firm scab has formed; the scab is then left to spontaneous desquamation.

2. Pyoktanin dusting powder (2 per cent.) may be sprinkled on skin abrasions, moist eczemas, and the like.

3. Pyoktanin dusting-powder ( $\frac{1}{4}$  per cent.) is more especially indicated for ophthalmology, in the milder forms of conjunctivitis, and in slight inflammations of the petuitary membrane.

4. Pyoktanin ointment (2 per cent. to 10 per cent.) is eligible in chronic marginal blepharitis, in eczemas, and in all those cases where the 2 per cent. dusting-powder is indicated.

5. Pyoktanin pencils (the large size) are used in minor surgery for the sterilization of fresh wounds, in small purulent wounds and ulcers (which, however, must not be much larger than a silver dollar), in small burns and scalds, in paronychias, etc. The pencil is dipped into water, and then passed over the traumatic surfaces until a continuous coat of color is apparent over their entire extent; thereupon they are abandoned to spontaneous desquamation. The small size is used principally for ophthalmological purposes, as the sterilization of purulent corneal ulcers.

6. Pyoktanin solutions ( $\frac{1}{1000}$  to  $\frac{1}{100}$ ) are used in conjunctival and corneal affections. For surgical use, the strength of the solution varies from  $\frac{1}{10000}$  to  $\frac{1}{1000}$ . Solutions of the latter strength are employed for general disinfection, in spittoons of consumptives, etc.

7. Pyoktanin surgical dressing-materials ( $\frac{1}{10}$  per cent.) are used for the bandaging of wounds, etc.; for the antiseptic stuffing of cavities, the

gauze must be impregnated with pure pyoktanin.—*Merck's Bulletin*, June, 1890, p. 49 et seq.

Dr. Carl, of Frankfurt, finds that in mucous affections of the eye all favorable influence must be denied to pyoktanin of methyl-violet aniline.

In abscesses of the cornea the action in some cases was good: but in no instance could Carl note any improvement due to the action of the remedy. In 1 case of *ulcus serpens* an interlamellar infiltration was generated by the use of methyl-violet, and then a ring-abscess was found which dissolved the cornea. This case prompts Carl to warn against the indiscriminate use of methyl-violet. Further unfavorable results with pyoktanin treatment are reported by Braunschweig, of Grate's clinic. Braunschweig treated 70 cases of diseases of the eye with pyoktanin. In not a few cases pyoktanin proved to be directly harmful; frequently severe pain was noted after instillation, and not infrequently conjunctivitis ensued, accompanied in 3 cases by pseudocroupous collection; in some cases keratitis was induced.—*Berliner klinische Wochenschrift*, No 37, 1890.

Pyoktanin is merely a trade-marked name for aniline, any shade (blue, yellow, red), chemically pure, free from arsenic and the fact that these products have antiseptic properties was published eighteen years ago in St. Louis by Dr. Charles O. Curtman, and many American physicians and surgeons in various localities have been quietly using aniline antiseptic solutions ever since.—*Notes on New Remedies*, October, 1890.—*Satellite*.

### IODOFORM AND CREASOTE AS AN INHALATION IN PHTHISIS.

The following inhalation is recommended by Brunton in the treatment of phthisis.

R.—Iodoform,	24 grains.
Creasote,	4 minims.
Oil of eucalyptus,	8 "
Chloroform,	48 "
Alcohol,	} equal parts to make $\frac{1}{2}$ ounce.
Ether,	

To be used in a Robison's inhaler.—*Virginia Medical Monthly*, August, 1890.

Salicylate of mercury is now administered in Syphilis, says the *Therapeutic Gazette*, June 16th, 1890, internally in the dose of from 1-64 to 1-25 of a grain in pill form two or three times daily, or it may be given in the form of intramuscular injection in the amount of  $\frac{1}{4}$  of a grain with an equal amount of potassium carbonate. Externally this salt has been employed as dressings or as salves in syphilitic ulcers and mucous patches, and as an injection for gonorrhœa with potassium carbonate in the strength of 6, 15, or 45 grains to each quart of water.



## TREATMENT OF TUBERCULOSIS WITH BORACIC ACID.

For the past five years, Dr. Gaucher has been studying the action of boracic acid on pulmonary tuberculosis. He has recently made public the results which so far have accrued from his researches. He first of all determined by means of experiments on animals the toxic limits of the acid when administered internally, and he found that this stood at the ratio of about a gramme to a kilogramme of the animal's weight. As to its subsequent elimination from the system, he found that this took place very readily and even rapidly by way of the renal secretion; there was therefore little fear of any accumulation or tardy cumulative action. But what was an equally important and desirable result, he found that the boracic acid was also eliminated appreciably through the expectoration; the sputum of tubercular patients whom he had subjected to this treatment was found to be very freely charged with the acid. Some of his experiments are not only interesting, but certainly encouraging in their ascertained results. For example, he took two or three rabbits and injected into their lungs through a needle syringe a few drops of a solution of pure tubercular culture. In this way he set up a local tuberculosis which became acouscous but not generalized. Some of the animals soon succumbed to pulmonary tuberculosis, and the surviving ones were shortly after destroyed. Well-marked phthisis was found in all post-mortem. He next repeated his inoculations on healthy rabbits in precisely the same manner, but he now fed the animals on bran mixed with boracic acid. After a time these also were sacrificed, but, contrary to what he found in his initial experiments, their lungs were quite free from any tubercular lesion, neither was any found elsewhere. It is submitted that, although these experiments on rabbits may not be altogether conclusive as to a like action of boracic acid on human tubercular subjects, they are at least—in the face of the enormous mortality from phthisis and hopelessness of therapeutic methods in general in this disease—worthy of serious attention and more extended trial. As to clinical results, so far as it has been tried, the boracic acid treatment has been found to bring about a notable diminution in the expectoration, which became more fluid and less purulent. Considerable time is, of course, necessary before speaking of remote or final results, but in the cases in which the treatment has been tried, and which have been under observation for a considerable period, it may be said that in general they improved in every way, while the tubercular trouble in the lung appeared to be at a standstill. The dose administered in these cases was one gramme in divided doses in the twenty-four hours. This, on the weight theory, must be considered insuffi-

cient. Taking the average weight of a patient to be sixty kilogrammes, and putting the limit of dose at twenty centigrammes for every three kilos, four grammes of the acid should be given per day, the dose being, of course, graduated up to this amount. Boracic acid will be found as a rule to agree well with the stomach, and is easily taken; it is not caustic, has no disagreeable taste, and in some cases was found even to check diarrhoea when this existed.—*Paris Correspondent, Lancet.*

## A RATIONAL TREATMENT OF SCIATICA.

For the relief of pain in very severe cases says Hammond, (*N. Y. Medical Journal*), it is absolutely necessary to use morphine. It should be injected hypodermically, as near the nerve as possible. In milder cases, phenacetin, antipyrine or acetanilide might be used. To relieve the neuritis, dependence is placed almost entirely upon rest, the application of cold, and the use of electricity.

Absolute rest is attained by keeping the patient in bed and employing the old-fashioned long splint, reaching from the axilla to the sole of the foot. It should be attached so as to leave the thigh and sole uncovered for the use of electricity. The splint should be removed for a short time every fourth day, in order to manipulate the joints and muscles to a slight degree. Cold should be applied to the sciatic region by means of ice bags.

Electricity is very useful, and only the continuous current should be employed, and in the following manner:

The negative electrode should be nine by four inches in size and should be strapped to the sole of the foot. The positive electrode about five to six inches square should be applied over the gluteal region, over the point of the exit from the pelvis of the sciatic nerve. If there are any tender points along the course of the nerve, this electrode should be changed occasionally, so as to cover them. The strength of the current should not be such as to cause much pain, but should fall short of this. The continuous current should be applied twice daily for about five minutes at each *séance*.—*Lancet Clinic.*

## SALOL IN CYSTITIS.

One of the commonest ailments among women which the general practitioner is called upon to treat, and which seems to be peculiarly prevalent in this class of patients, is a troublesome cystitis, due possibly to derangements of the pelvic circulation. Not rarely a very considerable amount of difficulty is experienced in overcoming the affection, which not only disturbs the rest of the sufferer, but often also very seriously affects her

mental state, causing her to be irritable, nervous, and a source of discomfort to all around her. For the treatment of such cases, resort has been had to innumerable remedies, and success has been claimed in this connection for the most dissimilar drugs and methods. Most frequently the cause of the distress is a vesical catarrh, the cure of which affords more or less complete relief of the condition. At other times the treatment which is found to be called for is constitutional rather than local; and cases also are met with that necessitate a union of both procedures. To this probably it is attributable that the recommendations of different practitioners cover so wide a range of ground, while it explains too, the reputed success of those who claim to have met with good results from the employment of medicines newly introduced into the Pharmacopœia. The drug most lately reported as being curative of the form of cystitis in question is salol; and three obstinate cases which were completely cured by its administration are described by Dr. Abbot in the *Boston Medical and Surgical Journal*. Each of the patients had been suffering for a considerable time, and had been treated with palliative means with more or less success, but without any permanent relief being obtained. The dose of salol given was ten grains three times a day, and in each, marked improvement of the symptoms was very speedily observed. One most satisfactory feature in the history is the rapidity with which the cure was effected, a week or ten days sufficing to bring it about in all three instances. When we remember that even months of treatment by other means may terminate in disappointment, it may well be considered that a method which promises so favorably deserves the widest possible trial, and no doubt the usefulness of the drug in question will soon be tested on a larger scale than has hitherto been the case.—*Med. Press and Circular*.

#### LAPAROTOMY FOR PERFORATING TYPHOID ULCER.

There can be doubt that the question of whether or not laparotomy for the relief of perforation of the intestine, which is apt to occur in the course of typhoid fever, is a legitimate operation must be answered in the affirmative. Although it is the case, we believe, that no successful result has so far been recorded, we need not necessarily conclude that under favorable circumstances recovery from so serious a lesion with the aid of operative interference is impossible. Kussmaul, of Strasburg, Bartlet, of Birmingham, Morton, of Pennsylvania, and Senn, of Milwaukee, have each recorded a case of laparotomy for typhoid perforation. The patients, unfortunately, all died, the deaths taking place between the limits of three and

eleven hours respectively. Again, Kimura, of the Naval Hospital at Yokosuka, in Japan, opened the abdomen of a man, aged thirty-four in whom symptoms of perforation had developed in the course of an attack of typhoid. The operation was performed twenty-eight hours after the symptoms occurred. The peritoneal cavity was found to contain a large quantity of feculent matter, and the intestines to be covered with lymph. A perforation, the size of a small pea, was discovered in the small intestine about two inches above the cæcum. The edges of the perforation were inverted by the surgeon, and completely buried with ten interrupted Lembert sutures. The vermiform appendix, also being acutely inflamed and much changed in color, was ligatured and removed. The abdomen was thoroughly cleansed with a warm solution of dilute boracic acid, and antiseptic dressings applied to the wound. After recovering from the anæsthetic, the patient was cheerful, and quite free from the pain, which before had been agonizing. About eight hours afterwards, however, violent pain in the abdomen recommenced; in the course of a few hours more collapse set in, and the man succumbed. At the post-mortem examination it was found that one of the sutures had involved part of an ulcer, and this leading to the giving way of the suture, extravasation had recurred. This case, as well as all those in which laparotomy for this lesion has been attempted, only shows more clearly the necessity of operating without the least delay as soon as perforation supervenes.—*Med. Press and Circular*. ✕

#### SURGICAL TREATMENT OF TUBERCULOUS PERITONITIS.

M. Maurange (*Nouv. d'Obstétrique et de Gynec.*, September, 1890) has collected statistics of seventy-one cases in which abdominal section had been performed for tuberculous peritonitis; 83 per cent. were operative successes, and of these about half were doing well one year after the operation. In many cases which afterwards died of other tubercular affections the peritoneal lesions were found completely cured. The precise way in which cure of the local affection is brought about by abdominal section is not clear; many theories have been advanced. M. Maurange maintains that the operation simply places the patient in a condition favorable for cure by unburdening the peritoneal cavity of its ascitic effusion, which is, moreover, a true cultivating fluid. The proceeding also insures antiseptics. Abdominal section is not only advisable in cases where a localized tuberculous area exists, but also in cases where the patient's general condition grows worse, and where the disease spreads whether ascites exists or not. Some surgeons are content to open the peritoneal

cavity; others flush it with antiseptic lotions, dress it with iodoform, or drain. M. Mairange has seen good results follow a less extreme practice than abdominal section. The ascitic fluid is removed by aspiration; antiseptic washing with subsequent evacuation of the fluid follows the aspiration, and lastly variable quantities of a mixture are injected into the peritoneum. This mixture consists of four grammes of iodoform dissolved in one hundred grammes of liquid oil of vaseline. This injection can be safely repeated, considering the small proportion of the iodoform and the weak absorbing power of the diseased peritoneum.—*Supp. Brit. Med. Jour.*

### EPSOM SALT IN THE TREATMENT OF DYSENTERY.

Surgeon A. W. D. Leahy, of India (*Lancet*, October 4, 1890), has treated 103 cases of acute dysentery by the administration of a saturated solution of sulphate of magnesium, to which was added a small quantity of dilute sulphuric acid. In the early stages of dysentery this treatment, as the author has found, is remarkably efficient; the temperature falls, mucus and blood disappear from the stools, which become copious, feculent, and bilious; tenesmus ceases; the skin acts well, and the patient sleeps after the first few doses. The more chronic the case, the less apparent are the advantages of the treatment.

The method is carried out as follows: A drachm of the saturated solution of the salt with ten drops of dilute sulphuric acid are given every one or two hours, until the stools become more copious, feculent, and free from blood and mucus, the temperature falls, and the pain and tenesmus cease. When the stools are normal in character and are reduced to two or three in the twenty-four hours, an ordinary astringent mixture with opium or cannabis indica is usually all that is necessary to complete the cure.

The advantages of this method over the usual ipecacuanha treatment are, that it has no depressing effect; that it produces neither nausea nor vomiting; and that it quiets and soothes the patient. It probably prevents the formation of ulcers by its influence upon the hyperemia of the bowel.

### SUPPOSITORY FOR CYSTITIS.

R.—Iodoform,	24 grains.
Extract of belladonna,	$\frac{1}{2}$ grain.
Cacao butter,	45 grains.

Pass this well into the bowel, and morning and night inject into the rectum hot water. If any inflammation of the urethra occurs or is present, 1 grain of terpine or salol may be given in pill twice a day.

### THE DRY METHOD OF TREATING WOUNDS.

Dr. Hal C. Wyman, of Detroit, calls attention to this valuable method of treating wounds. The treatment consists in drying the wound with hot, dry towels taken from an oven where they have been heated to 212° F. (100° C). No water is allowed to touch the wound or the adjacent parts, from first dressing to final healing. Loose fragments are removed; all tissues bruised beyond repair are cut away with scissors; blood and dirt are scraped away with hot, dry towels. All lacerated parts are approximated and held with sutures which have been freshly sterilized by dry heat. Then a dry mixture of Wyeth's impalpable powder of boracic acid (7 parts) and iodoform (1 part) is rubbed into the wound along the lines of approximation. Over this are laid strips of dry iodoform gauze. Over them okum freshly sterilized by heat, and over the okum freshly sterilized cotton, held in place by a roller bandage fresh from the oven.

The dressings are allowed to remain undisturbed until healed, unless pain, rise of temperature, or soiling of the dressing by discharges, indicates that fresh dressings are needed. This method, he claims, favors the cleaning of the wound, favors the control of hemorrhage, diminishes the tendency to fermentation and putrefaction, hastens the repair of wounds, and insures the healing of flaps and ragged pieces which by the wet method would slough.—*The Dicke Doctor*, September, 1890 *Satellite*.

### PALPITATION OF THE HEART.

Dr. Nebo (*Journal de la Santé*), says that an excessive palpitation of the heart can always be arrested by bending double, with the head downward and the hands pendent, so as to produce a temporary congestion of the upper part of the body. In almost all cases of nervous or anæmic palpitation, the heart immediately resumes its natural function. If the respiratory movements be suspended during this action, the effect is only the more rapid.

[We saw a demonstration of this feat by an intelligent friend who was subject to wildly irregular heart, but have never seen it in print before].—*Southern Clinic*.

### TREATMENT OF OZÆNA.

Cozzolini recommends the following powder for the treatment of this troublesome affection:

R.—Salol,	2 drachms.
Boric acid,	1 drachm.
Salicylic acid,	12 grains.
Thymol,	5 "
Powdered tale,	3 "

Use as an insufflation.

—*Provincial Medical Journal*, August, 1890.

## ACETANILIDE IN TYPHOID FEVER AND THE HECTIC FEVER OF TUBERCULOSIS.

According to the observations of Dr. A. Favrat on a large number of cases under the care of Professor Sahli (of Berne), acetanilide, administered in doses of 0.05 to 0.10 gramme ( $\frac{3}{4}$  to  $1\frac{1}{2}$  grains) every hour or two, according to the susceptibility of the patient, or 0.20 to 2.0 grammes (3 to 30 grains) daily (0.50 to 0.80 gramme— $7\frac{1}{2}$  to 12 grains—being the usual amount), gives great subjective relief to the patient, and effects a marked and persistent decline in the temperature, without the inconveniences and dangers of the same medicament taken in larger doses at longer intervals (collapse, cyanosis, chilliness, profuse sweats). The antipyretic effect is, moreover, most marked when the fever is very intense. After a dose of 5 to 10 centigrammes ( $\frac{3}{4}$  to  $1\frac{1}{2}$  grains), the temperature declines generally  $1^{\circ}$  C. ( $1.8^{\circ}$  F.) sometimes even  $2^{\circ}$  C. ( $3.6^{\circ}$  F.), and this lowered temperature may be maintained by the subsequent doses of the remedy.

The use of acetanilide, however prolonged, does not produce any unpleasant effects.

In infants, the dose need not exceed 1 or 2 centigrammes ( $\frac{1}{16}$  to  $\frac{1}{8}$  grain).—*La Semaine Médicale*,—*Satellite*.

## ALKALIES IN DYSPEPSIA.

M. Germain Sée, in an article published in the *Semaine Médicale*, says that alkalies frequently fail to do good in dyspepsia, owing to improper methods of administration. He recommends that 3 to 4 grammes (45 to 60 grains) of sodium bicarbonate, dissolved in warm water, be given at the time of the greatest acidity, which is generally two or three hours after meals. Smaller doses do not sufficiently neutralize the acid, while larger ones may do harm by leaving the stomach contents alkaline, the object being to keep the gastric juice at its normal acidity. In dyspepsia, with insufficient secretion of hydrochloric acid, such as is met with in anemia and neurasthenia, alkalies in small doses should be given half an hour before meals. It has been experimentally shown that this increases the amount of acid secreted. General hygiene and dietetic treatment should not be neglected.—*British Medical Journal*, October 4, 1890, Suppl., p. 6.—*Satellite*.

## HOW TO WASH OUT A BABY'S STOMACH.

Dr. A. Seibert (*The Dixie Doctor*, April, 1890), says: A No. 10 soft rubber catheter is attached to a glass tube six inches long. The operator is seated before the child, which is held

upright (as in throat inspection) or on one side. The left index-finger of the operator is held between the right upper and lower maxilla, just so as to prevent the mouth from closing. Then the tube is passed over the tongue into the pharynx, the head of the child inclining slightly forward. By gentle pressure we overcome the spasmodic constriction of the upper pharyngeal muscles, and then the catheter glides easily into the stomach. Now, the left hand holds the catheter and the right attaches the lower end of the tubing of the fountain-syringe or regular irrigator over the glass tube attached to the catheter. Water is now allowed to flow, and after the stomach is filled, the supply is shut off, the tube detached, and the end of the glass tube lowered below the child's umbilicus, so the contents of the stomach come up very nicely. Never use force. No trained assistant is necessary. The tube will never enter the larynx. The younger the babe, the easier it is to wash its stomach.—*Lancet-Clinic*.

## HYPODERMIC INJECTIONS OF PILOCARPINE.

Dr. Holtenhoff, of Geneva, recommends that the utmost caution should be used in regard to subcutaneous injections of pilocarpine. He has observed cases where even 1-100th gr., or 1-75th gr., of the drug gave rise to such disagreeable accessory effects as collapse with cold sweats and an agonizing sensation of impending dissolution. Not more than 1-200th gr., should be the dose to commence with. According to the author's estimation, even 1-100th grain may prove sufficient to kill an adult man.—*British Medical Journal*.

## TREATMENT OF SYCOSIS.

Rosenthal applies the following in this condition:

R.—Tannic acid, 15 grains.  
Milk of sulphur, 30 "  
Vaseline, 5 ounces.—M.

During the day no applications are used, but at night the ointment is thoroughly applied. The following, recommended by Hebra, may also be resorted to:

R.—Tannic acid, 75 grains.  
Milk of sulphur, 150 "  
Oxide of zinc, } of each 9 drachms.  
Starch, }  
Vaseline, 1½ ounces.—M.

After the ointment is applied, it is covered with iodoform-gauze.—*Rev. Gén. de Clin. et de Thérapeutique*.

## ANTIPYRINE IN ERYSIPELAS.

Dr. Favre, of Fribourg, says the *British Medical Journal*, has reported an unusually severe case of erysipelas showing the high curative value of antipyrine. A woman, aged thirty years, suffered from facial erysipelas accompanied by somnolence, vomiting, constipation, and high fever. In spite of application of cold carbolic acid, ichthyol, corrosive sublimate, strips of adhesive plaster, etc., the morbid process gradually extended over the scalp, neck, chest, upper extremities, abdomen, and buttocks. On the tenth day the administration of antipyrine was begun, with the result that the febrile symptoms were at once decidedly reduced, the eruption soon ceased to spread, and the patient's subjective state was greatly improved.

## • DIURETIN.

This substance is a sodio-salicylate of theobromine, and possesses certain properties common to theobromine, and caffeine, although it does not cause the mental excitement and wakefulness which so often result from the use of caffeine. Diuretin has produced well-marked diuresis in many cases of dropsy associated with disease of the heart and kidneys, and its place in therapeutics appears to be close to that hitherto occupied by digitalis and strophanthus. The substance is fairly soluble in warm water, and remains in solution on cooling, but it has the disadvantage of undergoing changes rather rapidly unless kept in well-stoppered bottles.—*The Lancet*, October 11, 1890.

## A TEST FOR DRINKING-WATER.

A test for the purity of drinking-water is given as follows by Professor Angell, of the Michigan University: "Dissolve about  $\frac{1}{2}$  teaspoonful of the purest white sugar in a pint ( $\frac{1}{2}$  litre) bottle completely full of water to be tested, tightly stoppered; expose it to the day light and a temperature up to 70° F. (21.11° C.) after a day or two examine, holding the bottle against something black, for floating specks, which will betray the presence of organic matter in considerable proportion."—*Cincinnati Lancet-Clinic*, July, 1890.

## LOCAL ANÆSTHESIA FOR MINOR OPERATIONS.

In minor surgical operations, incision of a paronychia, evacuation of a glandular abscess, extirpation of a superficial epithelioma, etc., M. Dobisch, of Zwittau, uses, with success, the

following solution in spray to obtain local anæsthesia:—

R Mentholi, . . . 4.0 grammes (5j).  
Chloroformi, . . . 40.0 " (5x).  
Ætheris sulph., . . 60.0 " (5xv).—M

The local anæsthesia lasts from two to six minutes.—*Allgemeine Medicinische Central Zeitung*, *L'Union Médicale*.

## SYPHILITIC ULCERATIONS.

M. Plumert gives the following formulæ:—

R Hydrag. salicylat.,  
Potassii carbonat., ̄āā 1.00 gramme (gr.xv).  
Aque destillatæ, 100.00 grammes (5iij).—M  
Ft. sol.

Sig.: Bathe the ulcerations with the lotion, or apply compresses wet with the same.

The following ointment may also be used:—

R Hydrag. salicylat., 1.00 gramme (gr. xv),  
Vasellini . . . 30.00 grammes (5j).—M.

This ointment is also efficacious in eczema.—*L'Union Médicale*, October, *Satellite*.

## THE TREATMENT OF BULLET WOUNDS.

M. Rochet, after discussing the widely different opinions of the older surgeons, Paré, Sedillot, Larrey, Percy and others, who advocate the immediate removal of bullets, and those of Trélat and Verneuil, who advocate allowing them to remain, concludes that the danger of searching for the foreign body is often greater than allowing it to remain, since in case, of bad after-effects, endangering life, the search can be made then as well as at the immediate time of injury. He advises, however, immediate operation in case of wound of important organs where it is possible to reach the foreign body with the knife.—*Gazette des Hôpitaux*.

## BROMIDROSIS OF FEET.

Scott recommends the following:

R.—Biborate of sodium } of each 2 drachms.  
Salicylic acid, }  
Boric acid, 30 grains.  
Glycerin at 86° F. } of each 1 ounce.  
Alcohol, }

Mix, and use as a wash three times a day.

This application is particularly useful in those cases where much maceration of the skin is present, and where remedies of other kinds have failed.—*Medical News*.

## OINTMENT FOR SYPHILITIC ALOPECIA.

According to *L'Union Médicale*, July 31, 1890, Mauriac recommends the following application for the relief of syphilitic alopecia:

R.—Sulphate of quinine, } of each  $7\frac{1}{2}$  grains.  
Turpeth mineral, }  
Suet, 1 ounce.

Make this into a pomade, and apply night and morning. Every second day use the following wash:

R.—Carbonate of sodium, } of each 15 grains.  
Boric acid, }  
Distilled water, 8 ounces.

If the disease persists, a lotion of mercuric chloride of the strength of 1 to 500 or 1 to 1000 may be used, or in other instances yellow precipitate ointment will be more efficacious.

## TREATMENT OF CHANCRES BY CREOLIN.

In the *Bulletin Générale de Théraputique*, July 15, 1890, Busque, of Brazil, writes a note to Dujardin-Beaumetz, detailing his experiences in the treatment of chancres by this means.

His custom is to apply to the sore a solution of the strength of from 12 to 20 parts to 1000, and he believes that the progress of the malady is shortened and relief speedily obtained. Compared to iodoform Busque thinks these solutions of creolin equally serviceable. The best treatment, however, is to combine these drugs, using the creolin solution as a wash and then iodoform as a dressing.

For eczema of dentition, treatment is to be directed to three indications (*Gazette Hebdom.*, in *Annals of Gynecology and Pediatrics*, July, 1890):

1. To calm pruritus of the gums, frequent rubbing with the finger dipped in a solution of the following:—

R. Cocaine hydrochlorat., gr. j  
Potass. Bromid., gr. x  
Glycerin,  
Aque destilat., āā f  $\bar{3}$  ss M.

2. For insomnia a dessertspoonful hourly of:

R. Sodii bromidi, gr. xij  
Syrup, aurant. flor., f  $\bar{3}$  iij M.

3. For the local eczema the following:—

R. Zinci oxid., gr. xx  
Vaseline, 5j. M.

## ACETATE OF AMMONIA IN SCARLET FEVER.

After experimenting with acetate of ammonia in scarlet fever, M. Vidal arrives at the following conclusions:—

1. Acetate of ammonia is well tolerated in

the human organism in the dose of 1 gramme (15 grains) per year of age, in infants as well as in adults. I do not, however, in the adult, exceed a daily dose of 35 grammes ( $1\frac{1}{5}$  ounces).

There is reason to believe that, in this dose, acetate of ammonia, in rapidly lowering the high temperature of the body, constitutes a valuable means of treatment in scarlet fever, and, perhaps, also in other eruptive fevers.

3. The action of this remedy has always appeared more quickly when it has been administered very early in the disease.—*L'Union Médicale*, August 9, 1890, p. 202.

## FOR PSORIASIS.

Mr. Jonathan Hutchinson's favorite prescription for psoriasis is:

R. Acid. cinrysophanic., grs. x.  
Liquor carbonis detergent., ℥ x.  
Hydrargyri am. chlorid., grs. x.  
Adipis benzoat., 5j.—M.  
Fiat ungutum.

At night the patient should wash the diseased surfaces free from all scales; then, standing before a fire, rub on the ointment, devoting, if possible, half an hour to the operation.

Mr. Hutchinson somewhat doubtfully prescribes arsenic internally along with the above.—*Archives of Surgery*.

## OINTMENT FOR PITYRIASIS VERSICOLOR.

R.—Acid salicylic, 1 drachm.  
Precipitated sulphur, 5 drachms.  
Vaseline, 3 ounces.

Make into an ointment, and before using place the affected part in hot water for several hours, adding one ounce and a half of powdered borax to each gallon of water used. The skin should be well dried before the salve is applied.—*L'Union Médicale*.

## PERSISTENT DANDRUFF.

Mr. Stephen, writing to the *Lancet*, says the following is very useful in persistent dandruff:

R. Resoacini,  
Ol. alivarium,  
Ætheris sulph., aa ʒiij.  
Supt. vini. rect., 5vjss.

To be well shaken and applied to the scalp by a bristle brush about twice as large as the ordinary mucilage brush, by insinuating it with the locks of hair. The head to be well washed with soap and warm water twice a week.—*Weekly Medical Review*.

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**EDITORS:**

**A. LAPTHORN SMITH, B.A., M.D., M.R.C.S., Eng., F.O.S., London**  
**F. WAYLAND CAMPBELL, M.A., M.D., L.R.C.P., London.**

**ASSISTANT EDITOR**

**ROLLO CAMPBELL, C.M., M.D**

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MONTREAL, JANUARY, 1891.

**TO OUR EXCHANGES.**

Owing to the smallness of the type used in addressing some of the exchanges sent to us many of them have gone astray. As we value our exchanges highly, and keep many of them on file, this is very annoying. The only remedy we can suggest is to have the addresses printed in large clear type.

**LIABILITY OF THE JEWS TO CANCER.**

It was stated recently by a leading Rabbi in the course of a lecture on the Jewish laws concerning diet that owing to their abstinence from pork, the Jews enjoyed a special immunity from cancer. On referring, however, to statistics which we have just received from Washington we learn that this is not the case. On page 15, table xi, we find that of 1000 deaths among Jews there were 13.58 due to cancer for males and 21.65 for females, while for the whole of the United States the death rate was 13.09 for males and 23.59 for females. So that the statement above made does not seem to be borne out by facts,

**THE KOCH TREATMENT.**

In reading over our exchanges during the last month or more, the prevailing topic both of original communications, correspondence and of editorials, has been Koch's remedy for consumption. At first the enthusiasm knew no bounds. Everybody seemed to be going mad over Kochism. Several thousand physicians suddenly abandoned their lucrative practices to visit Berlin in order to learn the method of manufacture of the wonderful golden brown curative fluid. Even consumptive patients who could afford it, like drowning men grasping at a straw, braved the dangers and hardships of a winter trip to Berlin in order to avail themselves of a last hope for life. The results have been both disappointing and encouraging. Disappointing to the patients who were far advanced in phthisis pulmonalis, for in these cases the remedy has been worse than useless, but encouraging to those in the early stages of that disease, for marked and decided benefit has been obtained in many cases. In lupus the lymph has shown a virtue beyond all precedent, and in those hospitals where it has had a fair trial no one disputes its wonderful effect. As to whether this effect will be permanent or not time alone can reveal. Again, in local tubercular affections, although by no means invariable, the results have been encouraging. We venture to predict that in twenty years at most it will be generally recognized that consumptives must be isolated as long as bacilli can be detected in the sputum, just as much as the small-pox patients are now isolated as long as crusts are coming off their bodies. Neither would this sure and only means of stamping out the disease involve such hardships as would at first appear to be necessary. It is rather a matter of dollars and cents than personal hardship. Let the Federal Government of every country build and equip sanatoria in the most suitable part of its dominions capable of affording a comfortable home for every known consumptive in the

country, and invite or compel every one in an infective condition to reside there free from expense or as expensively as the rich may wish. This would not involve absolute isolation of one's friends, as in the case of small-pox, for during the whole summer consumptives even in the last stage might freely mingle with their friends in the open air without any danger. It is only when the consumptive is boxed up in a warm room with a healthy person that the latter is apt to acquire the disease, so that in our opinion the whole question is whether it is worth while spending money to stamp out the disease, and if so, whether the representatives of the people will decide to spend it. In a country like the United States, where hundreds of millions of dollars are squandered, there should be no trouble about obtaining two or three million dollars a year for a sufficient number of years to completely stamp out the disease. Whenever, by treatment or otherwise, the sputum of a given case ceases to reveal the presence of bacilli under the microscope then that patient might safely return to his family and friends. Moreover this would only be doing systematically what thousands are doing in a dangerous and desultory manner by going away for the benefit of their health to California or Colorado; but for everyone who is benefited by that trip we venture to say that at least one more healthy person contracts the disease. Imagine a non-consumptive person in a run down condition going for a pleasure trip and being shut up for a week in the same section of a Pullman car with a consumptive person who is giving out millions of tubercle bacilli from his lungs per hour. We feel it our duty to insist, in season and out of season, on the importance of recognizing the infectious nature of this disease. A letter, published in this issue, from Dr. G. T. Ross, Professor of Physiology in Bishop's College, now investigating the Koch remedy in Europe, will be found interesting.

## DR. ALBERT P. SCOTT.

As we go to press we are under the painful necessity of chronicling the death of Albert P. Scott, C. M., M. D., (Bishop's, '87), L. R. C. P., Lond., Professor of Anatomy in the University of Bishop's College, who succumbed to an acute attack of pleurisy on Friday last, the 16th inst.\* A more lengthy obituary will appear in our next issue.

## BOOK NOTICES.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS, Consisting of Original Treatises and Reproductions in English, of Books and Monographs selected from the latest literature of foreign countries, with all illustrations, etc. Contents: Insomnia and its Therapeutics. By A. W. MacFarlane, M. D. Index to volume vii. Published monthly. Price, \$10.00 a year, single copies, \$1.00. September, 1890. New York: William Wood and Company, 56 and 58 Lafayette Place, 1890.

## NEWS ITEMS.

The Civil, Military and Naval Departments of the British Government are supplied with the Fairchild Digestive products, and the Fairchild preparations for the predigestion of milk, etc., are especially preferred in India.

We have much pleasure in calling the attention of our readers to the advertisement of the Davis & Lawrence Company on another page, especially with regard to their menthol plasters. Although we have not used these ourselves, we have heard sufficiently of them from reliable sources to be warranted in recommending them for trial in general practice. Menthol, as is well known, has a soothing, quieting influence upon the motor, sensory and reflex nerves of the spinal cord, and thus lessens irritation. On account of the effects of the ordinary modes of applying menthol, it is now offered in the form of a plaster. In this it is combined with medicinal gums, and produces an agreeable sensation on application. It is highly recommended for speedy and effectual relief of neuralgia pains in intercostal, facial, brachial or other neuralgias and even placed over the pit of the stomach for gastralgia, it is said to act like a charm. In order to meet the requirements of practitioners, it is put up in rolls one yard long and seven inches wide, which can be cut into seven plasters, and is sold at \$1 a yard.



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## Original Communications.

### THE MEDICAL TREATMENT OF PERITONITIS.

By Joseph Eichberg, M. D., of Cincinnati, Ohio.

The treatment of peritonitis must necessarily be adapted to the cause, and varies greatly as we are dealing with a primary or a secondary form of the affection. Yet, in many cases, the search for the cause is neither easy nor successful; and while uncertainty on this point may exist, our duty to the patient demands prompt action. The whole history of this affection is so recent that it is rather to be marvelled at that the plan of treatment now generally adopted has been matured in so short a time, and that, if properly carried out, it will in many cases prove so successful, independent of the causal condition.

A moment's consideration of the natural function of the peritoneum will help us considerably to understand why certain measures must be used to attain a favorable issue. As a delicate, smooth investment of nearly all the important organs of the abdominal cavity, its presence greatly facilitates those constant changes of size, position, and mutual relation that result from the various phases of the digestive process; its surface, kept constantly moist by the lymph that finds its way into the cavity, is never with an excess of fluid, because of stomata, or little lymph-mouths, that readily afford exit into the lymphatic circulation of any fluid that may accumulate in undue proportions—under physiological conditions.

With the appearance of inflammation the smooth, pliant, moist covering of the abdominal viscera becomes turgid and roughened, its surface covered with a viscid rather than a liquid product, its stomata closed, its cavity filled with

the accumulated inflammatory exudations, for which there is no escape. It is now that the necessity for treatment arises. The patient, in the great majority of cases, experiences that symptom, common to many affections, of pain, and pain in a most severe and intolerable form. It is here that we have an indication both causal and symptomatic, for pain itself is prostrating, and pain will kill. The organs covered by the peritoneum are richly supplied with nervous connections, and through these they influence by reflex action the heart and circulation. We know the sudden, it may be fatal, collapse that follows a severe blow or injury upon the abdomen, and it is not difficult to believe that an irritation of less intensity and longer duration would bring about similar results. The pain in peritonitis is continuous, exaggerated by every movement, by every breath; it excludes every other consideration, and prevents sleep and needed rest. It is here that opium comes to our aid—the sheet anchor, as it has been called, in peritonitis, the splint to the wounded peritoneum. I speak now of cases of acute diffuse peritonitis, the cases that are commonly met with.

It has seemed singular to me, after all that has been written and spoken upon this subject, that it should so frequently be necessary to encourage physicians to a more ready resort to this agent. It would seem that the proper amount of attention has not been given to the teachings of Alonzo Clark, who has summed up his own therapeutic experience of more than fifty years in the article upon this subject in *Pepper's System of Medicine*. Why it is that where such obvious indications for a remedy exist, so many medical men manifest an ill-founded timidity I cannot understand. Assuredly, it cannot be the fault of their teaching; and if they only dared to use it properly, their first experience with

opium in peritonitis would soon give them the needed confidence to do right by their patients. I feel very strongly upon this point, because it has happened to me to see several cases that made a lasting and very unfavorable impression. In one of these, a case of puerperal peritonitis seen in consultation not long ago, the patient had been receiving for six days—mark it well—an average of one-fourth of a grain of morphine daily. She had not slept one hour in all that time, and, it is almost needless to say, she died. In another case of acute peritonitis in a boy of fourteen years, I was assured by the attending physician that he gave a hypodermic injection of an eighth of a grain of morphine as often as he thought necessary—as though it were not necessary every half-hour!

The average medical graduate leaves college with the carefully-acquired information that the dose of opium is from one fourth to one-half a grain, every three or four hours, but that there are marked idiosyncrasies, and that its administration must be anxiously watched. He will, accordingly, treat his case of peritonitis on this plan, constantly feeling uneasy lest in his absence the patient develop narcotism. Finding that no symptoms of poisoning develop he will rest satisfied that he has done the full measure of his duty, and will repeat the small dose every three or four hours in his next case.

It is no imaginary picture that I am drawing; it is what I myself have seen; and it is time that the profession learned to regard this timorous, faint-hearted misuse of opium, deceiving alike to the practitioner and the patient, as malpractice; as criminal as the neglect to recognize a fracture, and place it in a suitable dressing. It has been said that there is no dose of opium for pain. This may be extended, and it may be as truthfully said that the smallest suitable dose of opium in peritonitis is that which will promptly carry the patient to the limits of narcotism, and that the frequency for its repetition is to be determined solely by the degree of narcotism. It is not conscientious regard for the patient's life that prevents the physician from following this plan. It is his own lack of courage which sacrifices the patient.

I am fully aware of arguments that have been advanced in answer to Dr. Clark's report of the case, who, at the height of the attack, received for six days the equivalent of from 421 to 467 grains of opium every twenty-four hours. It is said that of all this large amount but the smallest fraction was absorbed; that to get the proper dose it should be given hypodermically, etc. Supposing it was necessary to give 467 grains to obtain absorption for the amount required to cure the patient, then 467 grains was the proper dose in that case. Hypodermic medication, is unnecessary, as morphine can easily be given in concentrated solution by the mouth, and most of it will be absorbed before it enters the stomach,

to say nothing of the intestines. The basis of some of the opposition is, that in the inflamed condition of the peritoneum, the mesentery and its contained vessels, and the intestines and their lacteals, are unable to perform their physiological duty. The full measure of their physiological duty, we will admit, but certainly not a large fraction of it, else how could nutrition be maintained!

A word more as to the opium treatment. To secure its best effect it must be given early. It has for some time been my rule in every case commencing with fever, prostration, and an acute, localized, continuous pain, to begin the treatment at once with opium or morphine, without regard to the possibility of existing constipation. Should the painful symptoms subside in the course of a day or two the bowels may be opened by a mild saline cathartic, or, by what seems preferable me, repeated minute doses of calomel; but opium first, and all the time, until convinced that peritonitis, in its diffuse form, has not developed. Little attention need be paid to the bowels at the start. Clark says that he has allowed patients to go for fourteen days without a stool.

The use of opium does not always prevent the regular evacuations, and I have seen a patient who had one movement daily during the entire course of his disease, though for two weeks he was receiving half a grain of morphine every hour, and, doubtless, many similar instances could be narrated. These cases should be regarded as exceptional, since the effect of the opium, as usually observed, is to retard greatly, if it does not wholly arrest, intestinal movements. By diminishing the frequency of respiration, the opium tends to eliminate another source of pain, as well as to prevent that rapid spread of the disease which the constant attrition of diseased against healthy portions of the peritoneum will almost surely entail. Upon the circulation, too, the action of the opium must be regarded as largely beneficial. The slowing of the heart-beats with the rise in arterial tension following its use, are ample testimony that, if properly controlled, it is a cardiac tonic. We obtain this result at once, but it is necessary to carry the patient beyond this point, and to induce a sedative action on the circulation.

How are we to judge of the proper degree of narcotism, seeing that it is easy to carry the patient beyond the desired point, especially while employing such large doses? Not by the relief of pain, for this result may be attained early; nor by the contracted pupil, which also shows itself after very moderate doses. The index of the proper degree of narcotism is furnished by the respiration, the pulse, the continual drowsiness of the patient, and the partial relaxation of the abdominal wall. The frequency of the respirations, increased by the embarrassment of the abdominal movements, should be

brought down to twelve or ten per minute, and maintained at this rate as long as the symptoms persist; should it fall below this limit, the interval between two successive doses can be lengthened. The pulse of peritonitis is hard and wiry; under the influence of these full doses of opium it becomes slow, soft, and compressible. The drowsiness of the patient is a symptom that should be watched by the physician himself, and not trusted to either nurse or attendant. It should be a drowsiness from which the patient can be readily roused, and should never be allowed to become a stupor. It is well in connection with this, to bear in mind that the maximum effect of any dose of opium or its derivatives is not obtained until three hours after administration—a safe criterion in deciding the frequency of repetition of our doses. With the patient fairly narcotized, there is slight relaxation of the abdominal muscles, the tympanites becomes less, with corresponding relief from the feeling of tension.

One effect incidental to the use of opium remains to be mentioned, and that is, its influence upon the secretions. It diminishes the saliva and the urine promptly and decidedly; it slightly increases the amount of the perspiration, and thus may aid in counteracting an excessive elevation of temperature. With regard to its use in peritonitis Brunton says that "Opium, by its action on the peripheral terminations of vasomotor nerves, will prevent or diminish the reflex dilatation of the vessels, which the local irritation would otherwise produce; congestion will thus be diminished, and inflammation will be relieved." The action of opium in peritonitis is, therefore, probably twofold: First, it lessens peristaltic movements of the intestines, and thus diminishes local irritation; secondly, it lessens reflex activity of the centres through which local irritation causes dilatation of the vessels, and thus it diminishes peritoneal congestion.

The unpleasant effect of opium and its derivatives upon the secretions has led me to combine with it minute doses of a drug at one time very generally used in the management of this disease, but latterly decried on all sides: I refer to a salt of mercury, the mild chloride being the form commonly employed. The physiological effects of mercury and its salts upon the saliva and the urine are directly antagonistic to that of opium, both of these secretions being increased by its use. By combining with our opiate a small quantity of calomel we are frequently enabled to avoid the furred tongue, the dry lips, the pasty and unpleasant taste in the mouth, that so frequently attend the employment of large doses of opium. Nor need there be much fear of ptialism when the two drugs are combined, as each in a measure counteracts the effects of the other. It is certain that mercury is tolerated better and for a longer time when combined with opium than when given alone.

Upon the urinary secretion the action of the mercurous salt is no less welcome. With the diminution of the secretion and the blunting of sensibility in the bladder, and with the impairment of muscular strength in the wall of this organ from the existing inflammation of its outer tunic, the expulsion of the urine is often effected with the greatest difficulty; at times, indeed, it becomes impossible. It is in relieving these symptoms that calomel often assists, especially when combined with digitalis in small doses.

It seems to me that calomel has yet another virtue that entitles it to particular consideration here, namely, its action upon the intestine and intestinal contents. It cannot longer be gainsaid that mercury and its salts in physiological doses act as cholagogues. As Brunton says in his admirable work upon pharmacology, "The real action of mercury as a cholagogue consists, not in its stimulating the liver to form more bile, but in removing more readily from the body the bile which is already present in excess." It appears to perform the function by stimulating the upper part of the small intestine, and thus causing the evacuation of the bile before time has been allowed for its reabsorption. The reasons for this supposition are: (1) That mercury is so beneficial in bilious disorders; (2) that it does cause the appearance of bile in the stools, for Buchheim has proved by analysis that the green stools which occur after purgation by calomel owe their color to bile; and (3) that in the stools passed after mercurial purgatives, leucin and tyrosin, the products of pancreatic digestion, have been found.

Now we know that one office of the bile is to promote peristalsis. If we can assist in regularly transmitting to the lower part of the intestine some of this fluid we counteract by just so much the obstinate constipation that, if too long continued, may in itself constitute a menace to the patient suffering from acute peritonitis. Bile also has a tendency to prevent decomposition of the residual alimentary mass, and it is assisted in this by the presence of mercury, which acts as a disinfectant of the intestinal contents. In peritonitis this tendency to decomposition is greatly assisted by the sluggish movement or inaction of the bowel, by the temporarily increased local temperature, and by the presence of a large amount of inflammatory fluid, and any remedy which can counteract this tendency is useful.

It has been my practice to combine one-tenth of a grain of calomel with each half-grain of morphine, and to continue the administration of both drugs until the bowels are easily moved. This result is generally obtained on the fourth or fifth day, when several stools are apt to follow in quick succession. Should the tendency to diarrhoea become annoying, the calomel is discontinued and the patient given a little of Hope's camphor mixture.

The only contraindication for the use of opium

may be furnished by the condition of the kidneys. Chronic interstitial nephritis, so insidious in its onset that the patient himself has never received any warning of its presence, is very apt to be revealed by the excessive effect of a single moderate dose of an opiate. The tendency to uræmia seems to be favored, if manifested before, or even to be developed, when not previously indicated, by the use of opium. Even in peritonitis, where there usually exists so remarkable a tolerance for this drug, the ill effects have not been wanting; so that patients suffering from peritonitis, occurring in the course of chronic Bright's disease, have quickly passed into a state of uræmic coma, with no symptoms of narcotism, and have died comatose, without rallying from the first attack.

My preference for morphine has always been strong, and I am in the habit of giving it in the form of a standard solution in cherry-laurel water, one grain to the drachm. Of this solution a sixth, fourth, third, or half can easily be given, and the cherry-laurel water acts in part as a gastric sedative, preventing the tendency to vomit which morphine produces in some patients. Where this tendency nevertheless exists I have given the morphine by suppositories or have substituted codeine, which must be given in doses four times greater than those of morphine, but is easy to administer, and little likely to produce gastric derangement.

With symptoms that from the beginning are chiefly local, it is but natural that local measures should have early occupied a prominent place in treatment. The local application of leeches, the use of blisters and other powerful counter-irritants have had their place and are now, happily, no longer relied upon. Not so with topical applications intended, by their temperature, to influence the course of the inflammation. Cold applications, hot applications, turpentine stupes, flaxseed or other poultices have had their champions, and are still very commonly used. It is sometimes difficult to decide what form of application may be best suited to the individual case, but it is a safe rule, in every instance, to consult the comfort of the patient, and to let that influence the selection of hot or cold applications. All of these applications are open to one serious objection, namely, that they require to be constantly changed—the cold applications, lest they get too hot, the warm, lest they grow too cold; and in these frequent manipulations the tender abdomen is liable to fresh injury.

It was formerly the practice in acute peritonitis, when mercury stood high in favor as the preliminary step in all kinds of treatment, to apply freely mercurial ointment to the abdomen, the ointment being spread upon flannel or some other soft fabric and left in contact with the abdomen. In the reaction following the excessive use of mercury the drug in all its forms was practically banished from the materia medi-

ca, save for a few specific purposes, and this use of it in peritonitis was banished with the rest. But the pendulum has swung a little too far in the other direction, and, I think, we must again return to many of the things that were found useful by our fathers in medicine. For the last three years every case that has come under my care, in hospital or private practice, has been treated by the free application of mercurial ointment over the whole abdomen. It has promptly relieved the feeling of rigidity and painful distention; the immediate effect has been cooling and pleasant to the patients and the tympanites has subsided as quickly as after any other local application. It constitutes a dressing that easily adapts itself to the shape of the abdomen; it does not annoy by its weight; there is no wetting of the bedclothes, and the patient is not disturbed for its frequent removal, the ointment being renewed but twice in twenty-four hours. In all of these particulars it possesses decided advantages over other local applications. The mercury is evidently absorbed very slowly, for I have yet to see a case of ptyalism from its use; and in many instances it has remained in contact with the skin for two or three weeks.

Of the individual symptoms but two require especial mention in connection with the treatment, namely, the vomiting and tympanites. The former, which frequently ushers in the whole train of symptoms, is often so severe at the outset as to suggest intestinal obstruction; yet it is promptly controlled, as a rule, by large doses of opium. When occurring later in the disease, cracked ice taken freely into the mouth, small quantities of iced champagne, alone or in combination with aromatic spirit of ammonia, or half-drop doses of creasote in emulsion of sweet almonds, usually succeeds in controlling the trouble. Champagne has the advantage of being a stimulant and at the same time a gastric sedative; it is readily taken by children as well as by adults, and its use can be continued through the entire course of the disease.

Tympanites is always present to a greater or less degree but rarely, except in peritonitis of septic origin, and especially in those forms incident to the puerperal period, does it become excessive. The abdominal distention may, however, attain such proportions that the upward pressure of the diaphragm becomes a dangerous impediment to the circulation and respiration, and calls for immediate relief. A rectal tube carried high into the bowel, and left there, may accomplish all that is necessary; but this result cannot be confidently expected, since the gaseous distention is found mainly in the small intestine. Under these circumstances it has been recommended to puncture the bowel with a hypodermic or aspirator needle through the abdominal wall. I cannot regard such a plan at wholly devoid of danger, and should resort to it

only in extreme cases, selecting a needle of the smallest calibre to be found. It is true that puncturing a healthy bowel is a matter of very little moment, since the muscular layer quickly contracts about the minute orifice, thus preventing the escape of liquid or gaseous intestinal contents; not so when puncture becomes necessary as a curative measure. Is not the tympanites itself evidence of paralysis, or great loss of tone of the bowel; and would not the increased pressure within the intestine tend to favor the escape of some of the intestinal contents as soon as the needle is withdrawn? Such considerations call for the exercise of the greatest care and discrimination with regard to this step.

The diet should be liquid, easily assimilated, and of a kind likely to leave but little residue. Some form of peptones, or peptonoids, now readily obtained, or, if need be, prepared by artificial digestion, constitutes at once a palatable drink and a food. A little alcoholic stimulant, brandy or whiskey, may be added from the first, and will help to sustain the patient. There should be plenty of fresh air, with a limited number of attendants. Above all I would enforce rest and quiet; and the constant stream of visitors that besets so many a sick-room is to be wholly interdicted.

I have made no reference to surgical measures, because I have been here dealing with what is known as acute idiopathic peritonitis, and surgical treatment is never called for in this disease, unless the case ends in abscess or diffuse suppuration. But with prompt resort to the treatment as here outlined such a termination is unlikely; and even in many of the secondary forms, occasioned by typhlitis or perityphlitis this treatment will obviate the necessity for an operation, which, however brilliant its results, is yet a very grave step for the patient, and not to be undertaken rashly. Despite the almost reckless manner in which the peritoneum is now treated by surgeons, we have the opinion of so brilliant and renowned an operator as Schede, advising against surgical intervention in peritonitis, simple or acute, and in perityphlitis during the height of the process, unless it can be pretty clearly shown in the latter case that perforation and a distinct tendency to sacculation exist.

The treatment of chronic peritonitis need occupy us but briefly. It may, indeed, well be questioned if such a disease as chronic peritonitis ever occurs, excepting that due to tubercular or cancerous infiltration. In both of these conditions supporting treatment, fresh air, good hygienic measures, and, in case of tubercular disease, the selection of a suitable climate, indicate the extent of the physician's power.

In cases of tubercular or cancerous peritonitis it frequently becomes necessary to interfere, by surgical means, owing to great distention of the abdominal walls by fluid effusion. The operation of tapping is the classic remedy for this

condition, but abdominal section, in the tubercular variety, seems to promise better results, as by means of it some cases have been cured. It is a question for pathologists whether these cases have really been tubercular in character, or whether the miliary nodules may not have been of the character of the tumors described as endothelioma, of which the peritoneum is the most frequent seat. At all events, we have not had records of every case successfully treated by incision, in which an autopsy subsequently revealed the return of the affection, nor can we understand from carefully-acquired knowledge of the life and habits of the tubercle bacillus how the mere exposure to the air for a few moments, and the contact with a warm solution of boric acid or plain boiled water, should permanently alter the conditions upon which its vitality depends. This question trenches, however, on the surgical aspects of the disease.

I am well aware that there can be no claim of novelty in the treatment here outlined, but it is sometimes desirable to burnish our old silver, and let the treasure appear in its true light.—*Philadelphia Med. News.*

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## Correspondence.

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### OUR BERLIN LETTER.

BERLIN, 27th Dec., 1890.

(From our own Correspondent.)

Editor CANADA MEDICAL RECORD.

DEAR EDITOR,—As promised in my last letter I now beg to furnish some account of work done with Koch remedy at Charité Hospital in the clinics of Von Bergman, Gerhardt, Leu, Rosenthal, &c., as well as at other hospitals, where good work has been done. The worst case of lupus treated here is the following: Jager, æt. 28, man of good physique and good family history, suffered from lupus for many years. On entering hospital the diseased tissue extended over both cheeks as high as malar bones, and outwards some two inches beyond angles of each jaw, downwards over lips, chin and neck to pomum Adami. Nose eaten away to bony septum and lupoid tissue extending upward over remaining nasal structure to lower border frontal bone; in fact, the face presented was a suppurating, ulcerating, putrid mass, emitting such a horrible odor as to make his presence in the ward unsupportable had it not been for the aid of antiseptics and deodorants. Treatment by Koch's lymph alone was begun on 9th December last by injection of 1 centigram. Reaction followed in five hours with T. of 103, P. 112. Three days after, on repeating the same dose, about similar results followed, and this happened until the

5th dose was given, when instead of fever following a sub-normal T. was caused. By increasing dose one-half a normal T. was reached, again on giving double original dose, viz., 0.02, T. became subnormal. This was on 23rd December, and the Christmas holidays interfering the patient received no further treatment until 29th December, when 0.03 c.c. were given without reaction. At this time, in spite of the intermission of about a week in treatment, the appearance of this patient was so remarkable in contrast to his condition on entering that one could not be otherwise than delighted at the wonderfully good effect produced. The last time I saw and talked with this man, only a number of isolated nodules of ulceration remained, and I know from experience in less aggravated cases that a week or two more would leave his face smooth and practically healed. In the same ward of the "Charité" another case was quite cured where the nose was half gone, while the face, hand and arm had been badly affected, there remaining only the smooth dark blue cicatricial surface where formerly for twelve years a distressing condition existed. In private talks with these patients they assured me that for the chance of attaining such good results they would be willing to undergo the worst phases of reaction and all its attending unpleasantnesses. Are not these results that call forth one's admiration? Suppose we admit that a recurrence of this disease is possible, even probable, and up to the present time no evidence is afforded to support such a conclusion, look at these patients to-day who have undergone years of misery of the most trying kind both to themselves and relatives. They would give their right hands for such relief as has already been afforded, and I would only add briefly that my conviction is the relief afforded by this remedy, even in reference to the disease of lupus alone, is worthy the highest praise we can bestow upon it.

The scope of this letter will not permit me to furnish one fractional part of the evidence collected in proof of the efficacy of the lymph, while a comparatively short account would contain most of the evidence against its use.

In *tuberculosis* of the lungs it is already established that far from being applicable to every case of this disease it is decidedly injurious and hastens the end in greatly advanced cases, with large cavities; on the other hand, both London and Berlin afford us abundant proof that in selected cases it is remarkably beneficial. My notes show that in many instances where moist rales and other evidences of tubercular deposit existed in both apices, extending over both back and front of chest with the usual accompanying signs of progressing tubercular disease such as cough, expectoration, night-sweating, emaciation, loss of appetite, dull percussion, etc., these conditions have been changed remarkably, and in a shorter time than

any other remedy was ever known to afford. This change meant briefly a decreased expectoration and lessened cough, cessation of sweating, gain of weight and good appetite. A clearing up of the moist rales with clear percussion, and instead of bronchial breathing a more vesicular murmur. Although an increase of the bacilli occurs after the first injections this passes off in most instances as the case progresses and few or none are discoverable later.

One case I saw in Charité Hospital where phth. pulmon. developed after typhoid fever, and patient gained, when this treatment was begun, just 13 lbs. in two weeks; this was looked on as phenomenal it is true, but he continued to gain steadily though more slowly in the following weeks, during which I saw him. His cough had quite left him, and although looking pale and anæmic he assured me he felt about as well as ever, and hoped soon to go home. At a recent meeting of Berlin Medical Society, Dr. Frenkel read records of the encouraging results in general improvements, a general diminution of dullness over the infiltrated areas, and in many cases a prospect of cure by Koch's remedy. Up to the time I left Berlin few cases had yet been discharged as cured from the hospitals. I had the good fortune to see one case of a youth, aged 18, who was treated in Dr. Cornet's private clinic, and who had the day I saw him received his last injection previous to being sent home. The lymph had ceased to affect him although at first the reactions were marked. He said that his trouble began three years previously, and although his symptoms were not of an aggravated kind his case was quite pronounced. He improved under treatment rapidly, so that eight weeks later he was allowed to return home with instructions to report in a month for another test injection. In his case I could not conveniently ascertain the action of the bacilli under treatment. Weight, strength and appetite were restored satisfactorily in every way. Cases of incipient phthisis it is considered take five to six weeks, and bad cases three to four months for satisfactory treatment. On the other hand, a young woman in Dr. Kranse's clinic told me that she was worse after six weeks of Koch's remedy and intended going home next day. A young man in a different ward of the same clinic expressed himself in the same terms. These were both cases with good-sized cavities, and the attending physicians were rather hopeless regarding them. I remember another case in London: said that he never had night sweats until beginning this treatment, and blamed it accordingly; and so from time to time one would meet occasional cases which discouraged treatment, but these were certainly the small minority. In advanced cases no good can be looked for with any confidence. Distinct contra-indications for the Koch treatment are great loss of strength, amyloid, or other degen-

eration of tissue, albumen, urea and cardiac complications of a serious nature. Koch does not regard slight heart disease as an obstacle, the pulse being increased long before the rise of T. I have seen hæmoptysis caused by the lymph in several instances, but after waiting three or four days, and no further indications, treatment was resumed without bad effect.

In Hamburg the treatment of tubercle was carried on effectively at the large general hospital there, and the results were most encouraging. All conditions and stages of phthisis pulmon. were treated, consequently ill effects presented themselves as well as good. In cases that were not too far advanced the patients showed unmistakable signs of benefit. At first the effect of reaction was loss in weight and strength, but that was very temporary, for a permanent gain in strength and flesh generally followed, with a relish and desire for food previously unknown. Owing to the fact that the good effects of this remedy are mostly confined to cases of the early stages of consumption, and to the fact that many cases in this condition when removed from the hardships of their every day life to where they are warmly housed and abundantly fed with what is wholesome and nourishing, frequently improve, it has been asserted that the effect of Koch's lymph is really secondary to the effect of the improved hygienic surroundings. Against that assertion we have emphatic statements from most of the leading medical men of our generation in praise of the remedy, and these men are well known to give stint praise where it is not merited. I think it may safely be said that this remedy to be successfully handled calls for a more accurate estimate of the patient's physical condition than any other known means of cure, and several days careful observation of the patient's condition are a necessary preliminary to treatment; a rule that is without exception. Then the continuance of this strict observation during reaction is as called for as the treatment itself, and this work must be carried out by competent trained assistants in order that every detail in the progress of the case may be noted. When as in this treatment the temperature has to be taken every two hours it would be unwise to trust to the assistance of a patient's relatives as a rule.

In *local tuberculosis* the results are regarded as generally beneficial. As in lung tubercle, so it is here foolish to look for markedly good results in every case treated. We are fairly well able now, however, to indicate from experience thus far afforded what kind of cases are most amenable to this treatment. In cases of chronic enlargements of joints I have seen after the subsidence of reaction a decided diminution of the morbid material, but surgery must still hold its own in such cases, and the necrotic material removed by drainage or otherwise. In chronic enlarged strumous glands remarkably good

results have been produced after two week's treatment.

Again, a case of chron. tubercular diarrhoea in the Charité Hospital, which had resisted every remedy they had given yielded in about a week to the lymph. No other remedy being employed while the lymph was given it was at least reasonable to suppose this agent effected the cure. The case progressed well subsequently under the same treatment.

In *Laryngeal tuberculosis*, I saw some excellent results without the evil effects that were dreaded so much at first when it was known the reactions were accompanied by various oedematous conditions. In Krause's clinic some interesting throat cases were treated with good effect. One instance in this clinic, where both laryngeal and lung tubercle were well developed, I would like to bring to your notice briefly. Wende, æt. 38, fair complexion, medium height, good family history, merchant, had symptoms of lung and throat trouble two years. On entering hospital the records show that he had severe cough with purulent sputum, smothered breathing, moist rales and dull percussion extending from apices of both lungs as far as fourth intercostal space; on left side a subclavicular cavity was found. Body shows general emaciation, and night-sweating was troublesome. Voice very hoarse, and throat showed a chronic laryngitis, with infiltration of left vocal cord, presence of bacilli in considerable amount demonstrated. Patient given full diet and put on lymph treatment by injection of 0.001 c.c. This small dose caused T. 103, P. 112, and respir. 40. This subsided but rose next day to 102° T., again becoming normal following day. Next injection given forty-eight hours after first, was increased to 0.0014 c.c., or an increase of about half a milligram. This gave sharp reaction, T. rising to 104° F. in about six hours, then dropping to normal, and next day rising to 103° and subsiding. The doses were gradually increased until in six weeks he was receiving 0.075 c.c. Results: night sweats arrested, laryngitis cured, improved percussion, diminished rales, patient claims to be greatly better and as cheerful as possible regarding his condition, cough much less, sputum less purulent and less in amount; formerly could not lie on right side, now comfortable in any position. The hoarseness was still marked but the generally improved condition of this patient was not only most gratifying to himself but satisfactory to his physician, for the case gave promise of best results even in the presence of fairly well advanced disease. In taking this patient's private address he promised to write me in a couple of months regarding his condition, for he was quite sanguine that about three months of the same treatment would enable him to work again and return home.

*Diagnostic value of the Lymph.* Although the remedy has been shown to be most insidious



in attaching itself to tubercular tissue generally this quality has been proved by no means invariable, for records are given where no reaction took place in the presence of undoubted pulmonary tubercle after injection of from 1 to 10 milligrams. Again fatal result has followed in some few instances from a minimum dose, where the case was supposed to be incipient phthisis but where the autopsy revealed unsuspected deep-seated cavities. Of the half dozen post-mortems witnessed by me in Europe after this treatment in every case the condition of the lungs was found to be such as would not warrant us giving the remedy in our present knowledge of its effects. In every case the tissues were either permeated generally by large tubercular deposits, some caseous, others softened into areas of pus, or the presence of cavities large and small have determined the fatal issue. Another factor very evident was the frequency in these cases of great emaciation and debility, such as would deter a cautious man from applying so powerful a remedy in even the smallest doses. The intravenous method of injecting the lymph as tried by Barcille in Italy, and which produced reaction when the hypodermic method failed, has not been done to any extent in Berlin, London, or Paris. As bearing on diagnostic value I will furnish the outline of a case treated in in Berlin. It was believed by the hospital surgeons to be cancer of soft palate, pharynx and tonsils. An injection was given experimentally with no expectation of reaction, but contrary to the accepted views a severe reaction followed. The affected parts within sight became swollen and quite red from congestion. In two days a sloughing condition presented itself over same surface which sloughs were in time expectorated, leaving red glazed patches behind, and in two weeks the throat was practically healed, while patient's health generally was greatly restored.

The latest phase of the Koch treatment is carried out at the hospital in Moabit, a suburb of Berlin. I refer to a few cases where resection of the ribs has been done to permit of cleansing out lung cavities, cauterizing these cavities, and local application of lymph thereto. Prof. Sonnenburg, who has the surgical wards in the Moabit hospitals, gives an elaborate account of these operations in the last *Deutsche Medicinische Wochenschrift* and their results, which are certainly satisfactory up to the present time. For the technique of the operation and the details of the work I would refer those interested to that journal. The surgical skill combined with the precision in medical diagnosis demanded by such operations precludes procedure of this kind outside of large hospital centres, but the Koch treatment outside of this phase of it can be creditably undertaken by the general practitioner who will assume the labor of clinical experience which alone can qualify him.

G. T. ROSS.

## Society Proceedings.

### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

*Stated Meeting, November 7th, 1890.*

F. J. SHEPHERD, M. D., PRESIDENT, IN THE CHAIR.

Drs. Muirhead and Thompson were elected members of the Society.

*Syphilitic Osteitis.*—Dr. Johnston exhibited specimens of severe condensing osteitis of the skull-cap and tibia, due to syphilis. From the same case, several black pigmental plaques were found situated in the pharynx on the left side, at the level of the glottis. The mucosa was thickened and deeply pigmented; the submucosa beneath was white, dense and very firm. There was no evidence of scarring or ulceration in the neighborhood. This condition was possibly due also to syphilis.

*Severe Syphilitic Ulceration of the Rectum leading to Perityphlitis.*—Dr. Johnston showed to the Society, from the same case, this very interesting specimen.

Dr. Shepherd, referring to the above specimens, dwelt upon the interest of a case with such widespread lesions, and the possible beneficial results that might have been obtained from antisyphilitic treatment; alluding to the perityphlitis, it was his opinion that an operation would have been justifiable if suppuration had occurred.

*Chronic Gastric Ulcer, Perforation and Fatal Peritonitis.*—Dr. Reddy related the clinical history of the case. The patient, a girl of 20, was acting as wet nurse when she first consulted him a few months ago. She then had symptoms of indigestion, for which pepsin was given. Two days later she felt well, and remained so for the following twelve days. When, apparently, after undue exposure to cold, she was seized with severe abdominal pain, and soon developed all the symptoms of an acute peritonitis. Salines were given and hot stupes applied. The pain was relieved, and for some hours the patient appeared much better; when she complained of slight pain in the left hypochondrium, vomited once, and suddenly died, thirty-six hours from the onset of her illness. Dr. Reddy remarked that at no time, during the illness, were there any symptoms pointing to the primary disease. He had since found out that the patient had been under treatment a year ago in the Montreal General Hospital for gastric ulcer. Dwelling upon the obscure symptoms of many of these cases of ulcer of the stomach, he mentioned the case, which had come under his notice, of a nurse who had died suddenly without ever evincing any signs indicating the lesion of the stomach.



Dr. Johnston exhibited, for Dr. Reddy, the stomach, which showed a small perforation in the base of a chronic gastric ulcer. The ulcer was one-half by one-quarter of an inch, situated posteriorly on the lesser curvature, midway between the pylorus and the fundus. About the ulcer were distinct, radiating fibrous bands in the submucosa. There was general acute purulent peritonitis with very marked cloudy swelling of the liver, kidneys and heart, the latter being probably the cause of the very sudden death noticed in the case.

*Discussion.*—Dr. Shepherd did not think that the relief from pain which followed the administration of salines could be attributed to the action of the salines; he rather believed that it was the quiet which in many cases precedes death.

Dr. Laphorn Smith cited his and others' opinion that salines alleviated pain in acute peritonitis.

Dr. MacDonnell dwelt upon the prevailing idea of the essential union of peritonitis with pain. We were too apt to regard peritonitis as always accompanied by pain. He referred to a fatal case of appendicitis which had been under his care in the hospital. The patient had been free from pain for two days previous to his death. Had he not been deceived by this lull in the symptoms, he believed that operative interference might have proved successful. Dr. M. thought that the explanation of the disappearance of the pain which occurs in some cases of acute peritonitis might be attributed to the peritoneum becoming accustomed to the inflammation.

*Submaxillary Calculus.*—Dr. Hutchinson exhibited this specimen, which was about the size of a marble. The patient, a man about 45, had come to him complaining of a sore mouth and difficulty of mastication. A hard lump was felt which proved to be a calculus, around which suppuration had commenced. It was situated in the Whartonian duct.

Dr. Shepherd remarked that these cases were comparatively rare. He referred to a specimen which Dr. Hingston had shown to the Society. Dr. H. had removed it from a patient who had been sent to him as the apparent subject of malignant disease. There had been considerable swelling and suppuration.

Dr. Laphorn Smith stated that he had exhibited before the Society a calculus the size of a pigeon's egg which he had removed from the parotid gland.

*Fibroma Pendulum.*—Dr. England brought before the Society a middle-aged man with a tumor, pendulus and pedunculated, growing from the upper and inner part of the thigh. The tumor, in size and appearance, was not unlike the scrotum. It was eight months since it was first noticed, and was growing more rapidly

of late. Patient complained of no pain beyond the inconvenience it gave him.

Dr. Johnston would not express himself positively as to the nature of the tumor short of a microscopical examination. He mentioned cases of congenital growths which, after a period of quiescence, suddenly took on active action.

Dr. Shepherd had seen several cases somewhat similar to the one under examination. He believed it allied to fibroma molluscum, found singly or in connection with smaller growths.

*Enormous Enlargement of the Liver.*—Dr. R. L. MacDonnell related the history of a female patient who had been sent to his clinic at the Montreal General Hospital for advice. She was 30 years of age, married, had three children and two miscarriages. There was every appearance of good health. There had never been anæmia, jaundice, ascites, nor gastric derangements. Ever since her first child was born she has suffered from occasional attacks of pain in the right hypochondrium, with a sense of discomfort at times, but she has not been laid up in such a way as to prevent her doing housework every day. There is no history of alcohol, but syphilis is highly probable, since her husband has been a man of very dissolute habits, and she has had a purulent uterine discharge for many years. The abdomen is not distended, but the walls are remarkably flaccid. The liver can be plainly felt extending downwards to a line two inches below the umbilicus, filling up the greater part of the abdominal cavity. The outline is uniform, and the cleft between the lobes can be distinctly felt. On palpation, the enlargement is uniformly dense and resisting. There is no fluctuation and the surface is quite smooth. The area of hepatic dulness in the right mammary line extends from the third rib to a line two inches below the umbilicus, and measures thirteen inches and a half. In the axillary line the liver extends as high as the 6th rib, and the dorsal line, its upper limit, is as high as the 9th rib. No splenic enlargement was discovered. Examination of the urine afforded negative evidence of disease. Dr. MacDonnell remarked that this was the largest liver he had ever measured, and that he thought it was larger than any on record. There were several noteworthy features in the case; (1) the excellent condition of the patient's health; (2) the absence of evidence of implication of the kidney or of the spleen was against the diagnosis of waxy disease; but still, it would be impossible to imagine a liver corresponding to a greater extent with every detail of the classical description of waxy disease. Moreover, there was fair evidence of a combination of two potent causes of waxy disease—chronic suppuration and syphilis. Cases are, however, on record both of cases of amyloid disease of the kidney in which no evidence was given by the urine, and of cases of amyloid disease of the liver in which the kidney was not

involved. He would make further observations of the case and report at a later date.

*Typhoid fever in an Infant Eight Months Old.*—Dr. F. R. England then read a paper on this case.

*Stated Meeting, November 21th, 1890.*

F. J. SHEPHERD, M. D., PRESIDENT, IN THE CHAIR.

Dr. J. Elder was elected a member of the Society.

*Spina Bifida.*—Dr. Johnston exhibited this specimen for Dr. Gurd. It was a female foetus, apparently about the 6th month. The extremities were well formed, amnion nowhere adherent. There was well-marked acrania (exencephalia) and spina bifida. In addition, there was a sharp angular curvature of the spine forwards, with moderate double lateral curvature in the lower dorsal region. The state of the nervous system could not be made out accurately, as the specimen was not received quite fresh. Recent researches by v. Recklinghausen and Klebs tended to show that the primary cellular disturbances, terminating in the production of spina bifida and rachischisis, took place at a much earlier period than had hitherto been supposed. Klebs even considered that the initial error of development was certainly to be placed as early as the time when active cellular growth was commencing in the notochord, and was even inclined to place them earlier still, at a period before the closure of the medullary canal, possibly even to abnormal arrangement of cells about the primitive groove, when the folds of the amnion were being formed. This view would materially alter the bearing of so-called maternal impression in this condition, as the impression, to be effective, must thus have occurred about the time when the first menstrual period was missed, presumably before the mother was conscious of being pregnant. A number of well preserved embryos in the early stages would be necessary to settle this question, and in order to be of real service in this way the specimens should be put in many times their volume of strong alcohol, a few hours, at the latest, after the abortion occurred, as by the end of twenty-four hours the delicate nervous structures were too far altered by decomposition to repay careful study.

Dr. Gurd said that this was an 8½ months foetus, and the second similar kind of monstrosity which this lady had given birth to. He had exhibited the first one about three years ago. It also had an encephalocele. He thought the deformity might be put down as resulting from maternal impressions, as the mother had each time, during pregnancy, visited her mother, who has been suffering from a form of insanity for about five years. Mrs. L., who had

given birth to this monster, has three well-formed, intelligent children living, one of whom was born about two years ago. This monster came with the arm presenting, but as it was felt to be so small, and as the abdomen indicated a small child, turning was not resorted to, and the case was left to nature for its delivery. The absence of a cranial vault did away with the usual difficulty of a cross-birth. The child weighed two pounds. There was an unusually large amount of amniotic fluid present.

*Discussion.*—Dr. Shepherd had found in many of these cases a musculus sternalis. It was absent in the present case.

Dr. F. W. Campbell did not think that in the present instance the abnormality in the development of the foetus could be attributed to maternal impressions.

Dr. Mills said that with respect to the representation in offspring of conditions in the ancestors, observation seemed to show that defects of the nervous system were especially liable to a varied or multiple manifestation. Insanity was not always insanity in the offspring but might be some other deviation from the normal, expressing itself, however, chiefly in the nervous system. And when one considered that at the outset the whole of the influence of ancestors was represented in two cells, the ovum and sperm cell, which cells, by union, segmentation, growth and development, gave rise to the whole being; and that during this the environment might be very variable, it was possible to understand even great organic differences, not to mention dynamic or functional ones. The whole brain at first was represented by but a few cells, and it seemed, possibly owing to environment, that in some cases hereditary tendencies might work out into the total absence of certain cells when there was much hindrance to normal development, and in other cases only to an imperfect functional action of cells present in the usual numbers and locality; hence a great variety of results from modifications at an early period of the history of the embryo. He could conceive this hereditary weakness of parts resulting, not in a corresponding functional defect in offspring, but in actual deficiency of parts; and that might have been the case in this monster, but, of course, it could not be demonstrated.

*Rare Form of Tumor of the Kidney.*—Dr. Jas. Bell then read a paper on this case.

*Discussion.*—Dr. Johnston believed the tumor to be of the nature of an adenoma of the kidney, and showed a series of specimens illustrating the principal forms of adenomata of the kidney.

Dr. Mills said there were three ways in which to account for the peculiar character of the contents of the cavity of the tumor. Either the faecal odor was due to the agency of bacteria that had in some way got into the sac and acted

on its contents, as they do in the intestines, and these give rise by their action to those chemical compounds responsible for what we term a faecal odor. Or the odor might be due to the absorption by the kidney (diseased one) of this body from the blood of the compound after it had passed in the blood—no doubt a normal action of the kidneys—at all events when skatol and indol were in excess. Or, again, the kidneys may normally remove from the blood bodies usually excreted in greater abundance by the intestines. The last two supposed cases were not in opposition, as both might happen together. For his own part, he had long been convinced that the excretions were much more complex than our analyses made them. If all the excretory organs were considered supplementary to one another, each possibly removing, in variable quantity, at least some of the bodies removed or manufactured from the blood, he believed the physician would have a truer and more useful view of eliminative processes. He had observed that in more than one portion of the body the secretions of parts were characterized in a way that suggested that they took on the nature of excretions that were, in some of their peculiarities, more in harmony with what was recognized commonly as the normal in those regions. He would instance the excretions of sebaceous glands and the mucous membrane of the nose, pharynx, etc. Micro-organisms might have something to do with this, but the general principles he had referred to seemed to him very inadequately recognized both by physicians and physiologists, and were of great practical importance.

Dr. Roddick had been present at the operation. It occurred to him that it was very likely that this faecal odor might have been due to the close contact of the bowel to the tumor, so that gases from the bowel reached the cavity of the tumor, or else, to the entrance of bacteria. He remarked that in many cases of abscess cavity in near neighborhood to the intestines a marked faecal odor was perceptible where there existed no apparent communication.

Dr. Smith agreed with Dr. Roddick, and believed the interchange between the bowel and the sac to be more or less osmotic.

Dr. Shepherd said that an abscess near the abdominal cavity never occurred without faecal odor.

Dr. James Bell, in replying, said that he agreed with Dr. Mills as to the probable cause of the faecal odor which, at the time of the operation, was so powerful that he thought there existed a communication with the bowel. A close examination at the post-mortem proved the contrary.

Dr. Johnston, referring to the very penetrating faecal odor, remarked that intestinal gases alone, without the presence of bacteria, could not produce it. Bacteria cut off from air usually

produce a different odor. The intestinal bacteria had entered the cavity of the tumor, and there, acting in a closed sac, had produced this very penetrating faecal odor.

*The Extra-Peritoneal Treatment of the Pedicle in Abdominal Hysterectomy for Fibroids.*—Dr. Laphorn Smith read a paper on this subject. Referring to those fibroids which were not amenable to Apostoli's method, and in which an operation was necessary, he urged the choice of abdominal hysterectomy, and the extra-peritoneal treatment of the stump. Dr. Price of Philadelphia, who employed this method, had had twenty-three consecutive hysterectomies without a death. The death-rate of the best operators using the intra-peritoneal method of treating the stump was as high as 50 per cent. The advantages of the extra-peritoneal method were:—

1st, The speed with which the operation could be completed, a very important factor in producing a low death rate;

2nd, The absolute security against hemorrhage, which is either directly or indirectly the cause of most of the deaths by the intra-peritoneal method. It is concealed, and the patient may die from hemorrhage without the operator's knowledge, while with the extra-peritoneal method, not a drop of blood could be lost without its being seen;

3rd, Even if hemorrhage were diagnosed in the intra-peritoneal method, its arrest would necessitate a serious second operation by the operator himself. In the extra-peritoneal method, the nurse could instantly stop it by making a quarter of a turn of the serre noué;

4th, By the intra-peritoneal method, it is absolutely impossible to sew the stump in such a way as to completely arrest oozing, owing to the oedematous nature of the tissues, and to the fact that the few ounces of bloody serum left in the cavity would offer a culture field for bacteria, with the results of septic peritonitis, which he had found present in those fatal cases so treated, in which the patient had not died from concealed hemorrhage. With the extra-peritoneal method, there is little or no oozing; but what little there is, is absorbed by the dressing and removed every few hours;

5th, In either case, if adhesions have been torn, a drainage-tube must be used;

6th, The constriction of the elastic band or other means of controlling hemorrhage during the preparation of the stump for intra-peritoneal treatment, causes paralysis of the blood-vessels and sometimes death of the peritoneum. In one case he had found the whole stump sloughing. With the extra-peritoneal method, downward sloughing of the stump has sometimes occurred, but this could be avoided by taking care to exert less pressure on it with the serre noué; as a rule, far too great force is applied; only enough should be applied to barely control

the hemorrhage, the wire being gradually tightened by the nurse on the appearance of oozing ;

7th, Although the extra-peritoneal method gives an enormously smaller death-rate than the intra-peritoneal method, neither is an ideal one. The only ideal method is (1) removing the tumor by abdominal section, leaving a rubber band on the stump, (2) dropping the stump into the abdominal cavity, (3) thorough disinfection of the vagina, and (4) vaginal extirpation of the stump, leaving lock forceps on the broad ligaments.

When this method is thoroughly known and practised by the best operators, the death-rate will probably fall to almost nothing. Dr. Mary A. Dickson of Brooklyn claims that she was the first to employ this method.

Dr. Bell, referring to the dangers of catgut mentioned in the course of Dr. Smith's paper, said that he used catgut when prepared by himself, and had had no occasion to regret its use. It could with proper care be properly sterilized.

Dr. Roddick thought that the rigid drainage-tube used in abdominal surgery might possibly do harm, and believed some more pliable material would be generally adopted.

Dr. Smith, in his reply, remarked that he condemned commercial catgut, but not that specially prepared by the surgeon himself.

*Appendicitis.*—Dr. J. H. B. Allen related the following clinical history :—Chas. B——, aged 86, consulted him about the 16th May last for intense and constant pain about the umbilicus. Patient had always enjoyed good health with the exception of an attack of colic a year ago, which lasted a few days, and was relieved by poultices and a free purge. He had first felt the pain the day before he saw Dr. A. The patient was unable to stand erect. There was no vomiting, and the bowels had moved once. On examination, there was marked tenderness in the right iliac region ; no signs of tumor ; pulse 66 ; temperature 101.2°. A quarter of a grain of morphia was given hypodermically and an enema and poultices ordered. Patient did not improve, and on the 17th the symptoms had become more aggravated. The enema had not acted, the bowels had not moved for 48 hours ; vomiting had now set in, and was almost constant. Abdomen distended and tender ; no dullness on percussion and no tumor felt. Temperature higher ; pulse 66. Thinking an operation necessary, Dr. Shepherd was called in consultation. It was decided to give the patient a drachm of sulphate of magnesia, and operate the next morning should there be no improvement. The next day, patient's condition being improved, the operation was deferred. A large enema of soap and water, with half an ounce of turpentine, was given, which brought away a considerable amount of feces. The patient improved steadily from this out, and made a good recovery. Dr. Allen believed the case to be one

of appendicitis. The onset was sudden, with signs of obstruction and localized tenderness. There was no history of biliary calculi, and no calculi were found in the feces. The history of his illness a year previous favored the appendix. The absence of the tumor, he thought, could be explained on anatomical grounds, as shown by Dr. Ransohoff in a recent paper. The appendix being deeply seated behind the cæcum and below the mesentery of the ileum, abscess about it may continue for some time without the occurrence of a tumor. He said the writer had directed attention to another clinical feature of many cases of appendicitis, the occurrence of intestinal obstruction which this case showed very well, and was probably due to the pressure of the thickened appendix upon the ileum from below and behind.

Dr. Shepherd mentioned that many cases of catarrh of the appendix passed off without further pathological change.

#### *Stated Meeting, December 5th, 1890.*

DR. FRANCIS J. SHEPHERD, PRESIDENT, IN THE CHAIR.

#### *Fibroid involving Posterior Wall of Uterus.*

—Dr. George Armstrong exhibited this specimen, which he had removed from a patient aged 31, married ten years, the mother of one full-grown child. The patient had been in fair health until last January, when menstruation became profuse ; she was unwell twice a month, each time lasting thirteen days. These symptoms continued until October, when she was seen by Dr. Armstrong. She was then very anæmic. Under examination, the cervix was found lacerated and the fundus somewhat enlarged. Nothing further abnormal was noticed. The cervix was then dilated and a fibroid found involving the posterior wall of the uterus, one-fifth of its surface being adherent to the uterine wall. The patient made a good recovery. Her menses were delayed, not reappearing until the 23rd November, six weeks from the date of the operation.

*Submucous Fibroid.*—Dr. Armstrong also showed this specimen, which he had removed from a woman aged 32, married thirteen years, sterile. Menstruation began at 12 years, which had since been regular, but scanty. When seen by Dr. Armstrong she was complaining of considerable bearing down pain and retention of urine. A large mass occupied the pelvic cavity, and the uterus was pushed up and out of the pelvis. The patient had had electrical treatment for six weeks without benefit (her weakened condition had not permitted the application of a strong current). The abdomen was opened and the tumor removed. The extra peritoneal method was adopted in the treatment of the pedicle.

Dr. Laphorn Smith referred to the advantages of the extra-peritoneal method of treating

the stump. He believed, however, the ideal operation would be removal of the tumor by abdominal section and vaginal extirpation of the stump.

Dr. Alloway, alluding to the first specimen exhibited by Dr. Armstrong, remarked that in cases of hemorrhage it was well to dilate and examine the cavity of the uterus, as the source of the hemorrhage often proceeded from growths, which, on being removed, improved all the symptoms. With regard to the operation adopted in the removal of the second specimen, he considered the treatment of the pedicle of prime importance. The danger in the use of the present method of constriction by Koeberlé's wire was sloughing above and below the constriction. The returns from this method were good, but not satisfactory. Dr. Alloway approved of the method employed by Dr. Kelly of Baltimore in hystero-myomectomy, an improvement on Schroeder's method of multiple sutures. "The abdomen is incised as usual, the tumor turned out, and a rubber ligature made to constrict the neck. The uterus is thus removed by V-shaped incisions. The raw surfaces are thus approximated by stout, buried, continuous catgut sutures, and the peritoneal edges by interrupted ones. The peritoneal sutures are left long, so that the stump can be drawn well up. The uterine arteries are then tied on each side by passing a silk ligature through the substance of the cervix, the rubber ligature is removed, and then the peritoneal surface of the stump united to the parietal peritoneum by continuous silk or catgut. No other sutures are applied, but the ligatures uniting the peritoneal edges of the stump are held by artery forceps."

Dr. Wm. Gardner had been very successful with the wire clamp. He believed that the constriction should be as little as possible. Tait always cut the wire on the second or third day, and so limited the amount of downward sloughing. He thought Dr. Kelly's method suited for typical cases of myoma when the cervix only is involved.

Dr. Geo. Armstrong removed the tension from forty-eight to seventy-two hours after the operation.

*Radical Cure of Femoral Hernia.*—Dr. Kenneth Cameron read the report of this case.

Dr. Mills asked Dr. Cameron his explanation of the nervous symptoms in this case.

Dr. Shepherd allied the nervous symptoms to those of hystero-epilepsy; the disappearance of which was most probably due to the moral effect of the operation.

Dr. Kenneth Cameron, in replying, believed the nervous symptoms present to be those of hysteria, aggravated, possibly, by family troubles.

*Compound Comminuted Fracture of the Thigh complicating the Knee-joint.*—Dr. James Bell brought before the Society a man, aged 30,

who, about three and a half months ago, had been brought to the hospital with a severe fracture of the lower third of the thigh, with extreme laceration of the soft parts. Amputation was deemed advisable, but patient's consent could not be obtained. Under ether, the wound was thoroughly cleansed; several small, loose fragments of bone removed, and one inch of the bone excised, equal, altogether, to four inches of the shaft of the femur. The articular end was split and the condyles pulled apart; these were brought together and pinned with MacEwen's nails for excision of the knee joint. No bad symptoms occurred. The temperature never rose above  $99\frac{1}{2}^{\circ}$ . The patient was discharged within three months and twenty days, with good union and a fair amount of motion in the knee-joint, which Dr. B. believed would be improved by passive motion. There were three and a half inches of shortening.

Dr. Shepherd had seen the patient and had thought amputation necessary. He had never seen a better result from such a severe accident. Thought Dr. Bell should be congratulated on the result.

*Cardiac Phenomena in Typhoid Fever.*—Dr. McKechnie then read his paper.

Dr. James Stewart complimented the writer on a paper so thorough and well prepared. He agreed with the conclusions of Dr. McKechnie as to the origin of the murmurs. Referring to Case I, he did not believe that much stress should be laid on the diagnosis of dilatation by percussion, as it was open to many sources of error. He did not think that mere dilatation was sufficient to account for the murmur in Case I.

Dr. Mills believed that a dilatation could suddenly develop, which he based upon recent investigations on the heart. That this increased dilatation was due to the stimuli acting through the nervous system, on removal of which, the heart returned to its original contour, leaving no physical signs of dilatation.

Dr. McKechnie, in his reply, remarked that the capillary pulse noticed when Case II came under observation disappeared as the heart-walls weakened and reappeared as convalescence advanced.

G. H. Mumm & Co. stand on the list with the extraordinary importation of 90,130 cases of champagne. This is the highest figure ever reached by them, and in congratulating Messrs. Fred'k de Bary & Co. upon their grand success in 1890, we take occasion to point out that their advance during the year from 63,020 cases in 1889, or over 27,000 cases, is unprecedented in the annals of champagne importation.

This success, while largely owing to the remarkable quality of the wine, is likewise due to the untiring energy of the agents, who have our best wishes for the future.

## Progress of Science.

### THE ATMOSPHERIC TRACTOR.

A NEW INSTRUMENT, AND SOME NEW THEORIES IN OBSTETRICS.\*

By Peter McCahey, M. D., Philadelphia.

On December 26th, 1848, and February 7th, 1849,, Professor J. Y. Simpson, of Edinburgh, described before the Obstetric and Medico-Chirurgical Societies of that city, a device for assisting labor which he termed an Air-Tractor. In its first form it consisted of an ordinary metallic vaginal speculum, fitted with a piston and coated with leather at its cone-shaped end. This was finally discarded for a short brass syringe attached to an inner cup of metal, which was covered with an outer cup of rubber. The mouth of the inner cup was covered with a diaphragm of wire, within which was a piece of sponge or flannel, "with the view of preventing injury to the scalp and not allowing it to be elongated and drawn up into the vacuous space in the manner which we see occurring in the skin in the common operation of cupping. Such an instrument when fixed to the palm of the hand lifted readily a weight of thirty or forty pounds. This Dr. Simpson showed by experiments before this society." (Simpson's *Obstetric Memoirs*: Philadelphia, 1855.)

Professor Simpson in his eloquent and thoughtful manner pointed out the dangers incidental to prolonged labor and also to the use of the forceps, and declared his belief that the air-tractor would eventually prove a substitute for them in many cases. He explained the well-known principle of atmospheric pressure upon which it is based, and referred to the many instances in which the same principle is employed by the lower animals, such as the leech, the limpet and the cuttle-fish, to secure their food or to move about. He added that while the Tractor had been used in several cases "with results answering his best expectations, it admitted of much further improvement in construction, in mode of application, in working and in other details."

Unfortunately for humanity, it did not work, and was finally abandoned by its gifted inventor. So complete was its failure that, although Dr. Simpson lived until 1855, he did not publish any more in reference to it, nor is it mentioned even as a curiosity by any of his English or American contemporaries or successors.

Dr. Horatio R. Storer, the American editor of Professor Simpson's *Obstetric Memoirs*: stated in 1855 that "the chief objection to the practical use of the tractor is doubtless in its appli-

cation, and not in its power of traction; the large size of the caoutchouc cup rendering difficult its introduction within the maternal passages. To this may be added the difficulty of keeping the valves in working order. Dr. Simpson, however, holds, and we believe, correctly, that if ingenuity could suggest any form of tractor which umbrella-like could be folded into a little space for introduction and afterwards expanded over the scalp and then exhausted by the attached piston, it might supersede the forceps in many cases. . . . When we revert to the history of some of our most useful obstetric instruments (contrast, for example, the rude form of the early forceps with their present improved construction), we have reason to hope that the tractor may at some future time be so far improved as to be easily applied and used."

Dr. Simpson's tractor failed partly because of the difficulty of operating an air-pump within the vaginal canal, and partly because of defects in the construction of the cup.

If I had read of his failure, I would probably have considered it hopeless to try further experiments in the same direction.

In common with a great many others, I had not heard or read of them until after I had, as the result of independent inquiry and over five years of study and experiments, constructed a new and entirely practicable Atmospheric Tractor. On learning a few weeks ago of Dr. Simpson's efforts, I was at first disappointed to find that I was not, as I had supposed, the first to suggest its use. After further consideration, however, I think it will be admitted to be as great an honor to have succeeded where so brilliant an obstetrician and so able a man as Professor Simpson failed, as to have evolved the original idea.

I began the study of the subject in 1885, in the hope of finding some means of preventing the annoying retrocession of the head. I at first endeavored to secure this by a modification of the old abdominal bandage; but the forces driving the head were stronger than any power that could be exerted with the bandage. This led me to think that there must be some other agency producing the retrocession besides muscular resistance and bony rigidity. No doubt every physician has observed many cases in which the head retroceded, not only before the pelvic muscles could act, but even before it reached the pelvic floor. Further reflection and observation led me to the conclusion that atmospheric resistance is the principal factor in producing this retrocession and is in many cases a potent factor in delaying delivery.

When the uterus contracts round the body of the child, it expels all or nearly all the air from the uterine cavity, just as, when the hand firmly grasps a ball, the air is squeezed out from between it and the palm and fingers. The abdom-

\* Report of a demonstration before the Philadelphia County Medical Society, November 26th, 1890.

inal muscles then contract, forcing the fundus of the uterus down and pushing the child's body into the pelvic cavity. While this is occurring, there is a partial vacuum in the upper part of the uterus or that portion of it which is firmly contracted around the child. When the abdominal muscles relax, the pressure of the external air, and the expansive pressure of the air in the vagina are exerted against the head and shoulders of the child, and force it back until sufficient air enters the uterus to overcome or break up the vacuum and elevate the fundus. A similar process can be observed every day in the use of the ordinary ball-valve cupping apparatus. Pressure on the top of the ball drives out a certain quantity of air from the cup, but in a moment or two the expansive pressure of the remaining air forces the ball into its usual globular shape. The advantageous results which have been obtained by moving the forceps from side to side in cases where extraction is difficult, can readily be accounted for when it is realized that such motion permits the free ingress of air from the vagina and breaks up the uterine vacuum.

That the retrocession of the head is due to atmospheric pressure almost altogether and only in a small degree to muscular resistance or pelvic rigidity, must be obvious to those who have felt the head stop and recede before it had reached the pelvic floor and while it was still suspended in space a half an inch or more above the muscles.

Professor Duncan (Duncan's *Obstetric Essays*), who must have frequently noticed this apparent anomaly, realized the inadequacy of the commonly accepted theories on the subject, and ascribed the retrocession in such cases to the "retentivity of the abdomen," but failed to perceive that this retentivity is almost entirely the result of atmospheric pressure.

Being convinced that atmospheric pressure is one of the principal causes of delayed labor, and knowing that there is nothing more easily displaceable than air, I began to work upon the problem of how to lessen or remove it during labor. I am convinced that I have succeeded and that the atmospheric tractor which I have the honor to demonstrate before you this evening will inaugurate a new era in the history and practice of the Obstetric Art. It will be, not only a substitute for the forceps in cases in which instrumental aid is absolutely necessary, but it will also be an indispensable assistant in cases which are usually left to the tedious and painful efforts of Nature. With it the physician can dispense with anæsthetics and reduce the expulsive stage of labor to a few minutes, instead of hours, the agony of child-birth will be reduced to an infinitesimal degree without incurring any risk or inflicting any injury on either the mother or the child, and many lives will be saved which would otherwise be lost.

The operation is extremely simple. It consists in applying a cup or concave disk of rubber or other air-tight flexible material, to the child's head, and creating a vacuum within or beneath it, so that it will be firmly affixed to the head by atmospheric pressure, and then making traction on the handle of the cup or disk. Any amount of desired power can be obtained by employing a cup of sufficient area. The normal pressure of the atmosphere being fifteen pounds to the square inch, it is obvious that the tractile power capable of being exerted through a cup or disk of four square inches of area, and within or beneath which a vacuum has been formed, will be sixty pounds. The cup which I have here, covers when expanded a surface of about five square inches. If the vacuum beneath it were perfect and if the surface to which it is affixed were homogeneous, polished and solidly coherent, it would furnish a tractile force of almost seventy-five pounds. Allowing fifty per cent. for the loss of power consequent upon the elasticity of the cup, the flexible character of the scalp, and the mechanical impossibility of producing a complete vacuum, there will still be left a force of thirty-seven and a half pounds, which when properly applied is more than sufficient to quickly, and safely terminate any case of labor. It has been claimed that there are cases in which an enormous force is requisite, cases where the physician has been obliged to pull upon the forceps with all his force and even to ask an assistant to furnish additional power. Reflection will show, however, that in no such case has the physician exerted his entire muscular strength in endeavoring to extract the child. He may think he did, but he was involuntarily prevented from so doing, partly through the intuitive fear of injuring the mother or the child and partly by the expenditure of a considerable amount of his strength in maintaining his own equilibrium. Were a physician in any such case to exert his whole muscular force, he would pull patient and child out of the bed or haul both the bed and the patient around the room.

The large amount of force apparently required in some cases is because it is misdirected. The head is not properly flexed, and traction is exerted in a direction that would tend to pull the occiput through the pubic symphysis, instead of under the pubic arch, and it must be remembered that a great amount of force is unconsciously expended in maintaining the grip of the forceps on the child's head, especially if traction be made at the moment when the uterine vacuum is most complete. Experiment with any globular surface will show that unless increased pressure accompany the tractile efforts, the jaws of the forceps will be expanded and slip uselessly over the body that they were intended to move.

Scientific manipulation is the requisite in ob-



stetries, and not great force misapplied. If the occiput be lowered so that the head can revolve or pivot against and under the pubic arch, the voluntary or involuntary contraction of the child's posterior cervical muscles will be sufficient in many cases to throw the face upwards and outwards and facilitate or complete delivery. If the head be in a proper position for this final upward and outward rotary movement, comparatively little force is needed to complete delivery. Professor Duncan in his researches upon the power employed in labor arrived at the conclusion that "the maximum force in the most difficult labors does not exceed eighty pounds; that the great majority of labors are completed by a propelling force not exceeding forty pounds, and that in the easiest labors comparatively no force at all is exerted, the child gliding into the world by its own weight." An examination of his calculations will show that these estimates of eighty and forty pounds are much too high. He made the mistake of confounding the result of the force employed with the force itself. His experiments, briefly stated, consisted in fastening a series of sections of the amnion over a conical vessel, the mouth of which was about sixteen square inches in area. He connected this with a waterpipe of one inch in area and found that the amnions of minimum strength were ruptured when the pressure on the water in the pipe reached four ounces and those of maximum strength, when it reaches three and one-tenth pounds. He then calculated that if the pressure on one square inch of the strongest membrane at the time of its rupture was three and one-tenth pounds, the pressure on the entire thirteen square inches of it, when the bag of waters was projected through the os into the vagina, would be forty pounds. This was correct, but he erred in assuming that this forty pounds manifestation of pressure implied that there was forty pounds of force exerted to produce it. The laws of hydrodynamics and the laws of the multiplication of forces show that there is a very great disproportion between a force and its results or between the power exerted and the weight which that power will move. A force of one pound in the tube of the water bellows will lift one hundred pounds on its surface. A man with a crow-bar can move ten or fifteen tons. It may, therefore, be safely assumed that the bursting of the membranes under the pressure of three pounds to the square inch does not mean that there is a force of forty pounds or more exerted against the other end of the uterus. The proposition that eighty pounds of force is exerted in other cases as the result of muscular efforts is not much less extravagant than the assertion in *Tristram Shandy* that the force of the efforts in strong labor pains is equal upon an average to the weight of four hundred and seventy pounds, acting perpendicularly upon the head of the

child. A force of eighty pounds applied to the body of an unborn infant weighing five or six pounds would be equivalent to a force of two thousand pounds applied to the body of an average adult—more than sufficient in either case to produce immediate death.

Exerted as a tractile force, eighty pounds of power will move a weight of four hundred pounds, which is more than the usual weight of the bed, patient and child combined.

The problem in labor is to move a two-pound head two inches in one direction and eight or nine inches in another, through a channel, the walls of which are soft and yielding and covered with an unctuous secretion—conditions which reduce the element of friction to the lowest point. The occiput is only required to traverse the depth of the pubic symphysis, whilst the forehead and chin must traverse the entire depth of the pelvic cavity and extended perineum. It is obvious that the most rational way of accomplishing this complex movement is not to attempt to make the head advance as a whole, but to move one end first and then the other.

With the forceps the head must be moved more or less as a whole along the imaginary curve of Carus. With the forceps, practically nothing can be done but to pull. Rotation may be attempted, but in trying to perform it the points of the blades may, and often do, inflict serious injury upon maternal tissues.

With the Atmospheric Tractor nothing is more easy than to apply it to the upper portion of the head and bring down the occiput. It may then be applied to the lower portion of the cranium, and the forehead and chin may be easily drawn upwards and outwards, and delivery completed. If the head is caught on the pubic bone, as in a semi-frontal or brow presentation, it can be easily pushed back with the tractor, and then depressed or rotated in any desired manner before being brought down. The tractor is practically a clamp which can be firmly attached to a large area of surface, placing the head under the absolute control of the physician and enabling him to lift it, to turn it and to move it in any desired manner.

In order to apply it, all that is necessary is to see first that the os uteri is sufficiently dilated or dilatable to permit of its introduction. After having decided on the part of the head to which it is to be applied, place one hand against the abdominal projection, in order to prevent the head from receding, and introduce the tractor into the vagina or within the os, and firmly press it against the child's head until the handle or vacuum producer has driven out all the air from within the disk or cup. The handle can then be grasped, and extraction proceeded with. If, as occasionally happens, the head is dry, it ought to be moistened with water, or rubbed with some unctuous material.



The principal objections which may be urged against the use of the tractor are :

1. That the hair on the child's head will prevent it from being firmly applied.
2. That it is difficult to apply.
3. That its application will require injurious pressure.
4. That when applied it will exert injurious pressure.
5. That it will act as a cupping glass, producing an unsightly swelling or even—as has been thoughtlessly asserted—"draw out the child's brains."
6. That in using it the scalp might be torn off.
7. It will carry infection.

The first of these objections I will dispose of by a practical illustration. (Dr. McCahey here affixed the tractor on the head of an infant six weeks old, and after moving it around a cot which had been provided for the purpose, lifted it up in the air two or three times, the tractor remaining in position all the time and the child apparently suffering no pain.) These, and other objections which may be raised, are based upon a misapprehension, or a forgetfulness of the laws of hydro-dynamics.

As to the second objection, as you have just seen, the tractor is not difficult of application. As to the third, the amount of force necessary to create the desired vacuum is less than ten pounds at starting and decreases to almost nothing as the air is driven out of the cup, and it is exerted not on the head, but on the air within the cup.

The tractor cannot exert injurious pressure on the head. With it on the head there is no more pressure upon the area it covers than before it was applied. It merely takes the place of the lowest strata of air and is held against the scalp by the ordinary atmospheric pressure.

It will not act as a cupping glass, because it is applied flat against a large area, while a cupping glass is applied against a narrow circle, into which it is driven by the overlying air.

It will not produce an unsightly swelling, because there is no cavity into which an effusion can take place, and even if there were a large central opening, the brain would not be sucked up into it, because there is no internal pressure sufficiently strong to force the brain either through or against the scalp. The tractor may be applied with absolute safety over either the bony part of the skull or over the fontanelles.

There is no danger of detaching the scalp because the tractor is not sewed or glued to the skin. It is affixed against it by a certain atmospheric pressure. Traction exerted in excess of that pressure, will merely result in a separation of the disk from the scalp and not the tearing of the scalp from the bones. It can thus be seen that injurious or excessive force cannot be employed with it.

It is well to remember in this connection that while we do apparently pull the head and lift the child with it, in reality we simply relieve the front of the head from the pressure of a five-inch cylindrical column of air, thereby allowing the head to be moved forward or the child to be acted by the expansive force of the air behind or beneath it. No greater force of traction can possibly be exerted by this apparatus because at the instant when it passes beyond eight or ten pounds to the square inch, it will separate from the head.

If the disk or cup were left on the head for a long time it might produce a slight congestion of the skin or even a small swelling, but nothing comparable to the caput succedaneum or the cephalhematoma sometimes occurring, which are the result of continuous pressure against the rigid os or the bony pelvis. Even if there were a slight discoloration or effusion, it would be certain to pass away in a few hours or days, and must not be allowed to weigh for one moment against the instantaneous relief from pain and the quick and safe delivery obtained by the employment of the tractor.

Pain is due to the resistance met with by muscular action. The resistance encountered by the abdominal muscles when pressing the head of the child against the bony pelvis is productive of intense pain. If the position of the head be changed with the tractor, and the abdominal muscles be relieved of the necessity of expelling the child, the pain ceases as if by magic.

The danger of infection is absolutely nil, if ordinary cleanliness be observed. After using the tractor all that is necessary to purify it for the next case, is to place it for a few minutes in boiling water or any antiseptic solution.

I have constructed various forms of tractors, some with a ball-valve, some with an air-cock, to which a rubber tube three or four feet long is attached, and an air pump adjusted at the other end of the tube so that the nurse or other attendant could readily produce the desired vacuum, some with curved edges, some with concave edges; but the form I have exhibited to-night is the most readily applicable and the most reliable and best. As you see, it flattens itself out when applied to the head, thus giving an area of contact and traction equal to its entire surface. With the other forms, traction and contact can be obtained only with a limited area around the circumference.

The cups in which the air is exhausted by means of a pump or ball-valve are open to the serious objection that their valves would become clogged up with the material on the child's head, which would require that they should be taken apart and cleaned or discarded entirely after each case.

I have used the tractor in five cases, and in each case affected delivery with it in five

minutes. Without it labor would have been prolonged in all for hours—hours of suffering to the mothers and hours of more or less anxiety to the attendant. An instrument capable of producing such beneficial results is certainly to be universally employed within a comparatively brief period. *Report from Medical and Surgical Reporter, November 29th, 1890.*

219 North 22nd Street, Philadelphia.

### THE APOLLINARIS SPRING.

The Chicago *Inter Ocean* quotes the following from the London *Times* :

Apollinaris water is as familiar in millions of mouths as any household word. In the English translation, evidently made in Germany, from a German book on the mineral springs of the Ahr Valley, I find it stated that the mineral water from "the fountain Apollinaris is counted among the most luxurious drinks." Yet others than the spoiled children of luxury can afford to buy it, as the water is cheap as well as good, and the moderation of its price is one reason why the demand for it is great and increasing. It is not unworthy of note that an English company has the credit of having brought Apollinaris within the reach of all water drinkers. The company began its operations in 1873. The spring itself was discovered twenty-two years before.

There is a legend connected with nearly every mineral spring of note. In many cases it is very difficult to ascertain the actual facts or to separate fact from the mass of fiction. That the thermal springs of Bath and Teplitz should have been discovered by pigs, and those of Carlsbad by dogs may be true, but the evidence is of doubtful value. There is no question, however, either about the way in which the Apollinaris Springs was found, or as to the place after which it was named. Herr George Cruzberg, who lived at Ahrweiler, had a vineyard on the left bank of the River Ahr, at a short distance from the village of Nenenahr. He noticed that the vines would not flourish on a particular spot, and learned that carbonic-acid gas issued from the ground there. An eminent geologist, Professor Bischof, of Bonn, was consulted as to whether anything could be done in the matter, and he suggested that search should be made for a mineral spring, which might prove quite as remunerative as the most productive vines that the earth could produce. Accordingly a well was sunk, and at the depth of forty feet a spring was reached which rose to the surface with a force and effect of a small Icelandic geyser. This occurred in 1851. The Apollinariskirche is not far distant from the spring, which was named after it.

Chemical analysis showed a close resemblance between the Apollinaris Spring and those at

Selters and Ems, while in one respect it differed from any one of those which were then in high repute. This consisted in its containing such an extraordinary proportion of carbonic acid as to cause the water to boil upward as if it had been forced from below under strong pressure. The volume of gas is so great that it is dangerous to approach the spring on a windless day. More than one fatal accident has been caused by approaching the spring and inhaling the gas. At the outset it was found difficult to bottle the water. However, a means was devised for doing so.

I have long had a desire to visit the spring, to drink the water on the spot, and to see the arrangements for bottling and exporting it, but that desire has only now been gratified. The English company, which has enjoyed the exclusive right to bottle and export the water since 1873, has resolutely objected to make the place one where visitors might enjoy a new sensation, and by their presence impede the operations. Besides, many precautions have to be observed lest a fatal accident might happen through inhaling the carbonic-acid gas with which the air near the spring is heavy and deadly. Birds that alight near it die almost immediately. I saw three dead lying within half a yard of the spot. The English managing director, having kindly made an exception in my favor, I have now examined everything that is to be seen at the Apollinaris Spring; I have drunk the water as it issues from the source, and I watched the process from the moment the water is pumped from the spring till it is bottled, corked, labled, and packed for transmission to all quarters of the globe. The operations are many in number, and are carried on with an attention to detail which is beyond praise. Many difficulties have had to be surmounted, and the ingenuity displayed in overcoming them is highly creditable to all concerned.

The problem which had to be solved was how to bottle the water in such a way that all the carbonic-acid gas, which makes it sparkle, should be retained. As the temperature of the spring is 68° F., the tendency of the gas is to fly off on reaching the surface, and it is owing to the quantity of gas escaping where the spring rises from the ground that the surrounding air is mephitic. Without entering into mechanical details, I may concisely state that the process adopted consists in conducting as much of the gas as can be collected at the surface of the water to chambers, where it is compressed. The water is drawn from a depth of fifty feet below the surface and is elevated into tanks above the bottling house. This water and the natural gas are then brought together and mixed before entering the bottles, the result being that the bottled water is not only as pure, but as gaseous as the same water is far down in the rock through a fissure in which it ascends. Moreover, a part

of the carbonic-acid gas is forced under pressure in each empty bottle so as to expel the common air before the water enters it, and thus the drinker of the bottled water is certain of obtaining the water in its purely natural state.

It is scarcely necessary to explain, I think, that artificially aerated waters contain carbonic-acid gas, but this gas is not a product of the chemistry of nature. There is no difficulty in making it; the puzzle is how to obtain it as pure as it is in its natural form. The artificial gas can be washed, and the manufacturers of the best aerated waters take every precaution to insure the purity of the beverage which they supply; yet natural chemical processes are the only perfect ones, and the popularity of Apollinaris water is chiefly due to its irreproachable character. Though the water itself be so good, and the method of bottling it so complete, yet other things have an importance which is almost paramount.

The empty glass bottles are placed neck downward on a revolving table, and a stream of water is repeatedly forced into each under high pressure as the table moves round. A woman is stationed at one side of the table to watch each bottle, when empty and before being taken off, and see whether any impurity remains. As an electric glow light is behind the bottle the slightest speck in the glass can be detected by her at a glance. The stone bottles are kept filled for twenty-four hours, and if any leakage is perceptible they are broken up, and they are repeatedly washed before being filled with mineral water. Though the water forced into them is the same as that in the glass bottles, yet, as they cannot be corked with the same lightning rapidity, a portion of the gas escapes, and thus the water when poured out of them is less sparkling.

A few statistics will probably have greater attraction for those who have read what has been written; indeed, the figures in this case are more eloquent than any phrase. It was in 1873 that the Apollinaris Company began operations, and in that year the number of glass and stone bottles filled and exported was a little under 2,000,000. Last year the number was nearly 16,000,000, and orders have been given for a still larger supply of bottles in expectation of an increasing demand next year. The corks used last year weighed fifty-seven tons. These figures are gigantic, and were I not certain of their accuracy I should not give them. I was quite prepared for hearing that the total amounts were extraordinary, as I took pains to estimate the speed at which the bottles were filled during my visit, and found that the filling went on at the rate of 90,000 a day. Four hundred and fifty persons are engaged in the several operations.

The question may be put by others which I put after visiting the springs: "Should the de-

mand continue, can the supply keep pace with it?" Careful tests have been made, which demonstrate that the existing supply is adequate for filling 40,000,000 quart bottles yearly. When the demand is in excess of these figures, then the Apollinaris Company may have to sink a second well. It is quite clear, however, that the Apollinaris Spring yields enough water not only for present requirements, but also for those of a future which is still remote.

#### ARGYLE-ROBERTSON PUPIL.

At the February meeting of the Berlin Medical Society, Mendel read an interesting paper on this condition, of which the following is a condensed abstract taken from the *Centralblatt f. pr. Augenheilkunde*, February, 1890:

In 1869, Robertson first called attention to a special symptom in patients suffering from nervous disease. In eyes of normal vision and appearance the pupils failed to show the least direct reaction to light, contracting, however, readily on accommodation for near objects or on convergence. His observations were confirmed by other observers, and Erb showed that this symptom appears especially in two diseases, namely, tabes and the progressive paralysis of the insane, and in them so constantly as to be of considerable value in diagnosis, more especially as it is an early symptom, indeed sometimes the earliest. We should therefore be on the watch for it in suspected cases. In consideration of the importance of this symptom it is natural to ask where it is localized, with what changes in the nervous apparatus associated, or by what produced. An affection of the optic nerve will not produce it, as the Argyll-Robertson pupil may be found for years without change in visual acuity, neither can it be due to changes in the peripheral oculo-motorius, as it is hard to see how these nerve-fibres could act to accommodation and not to light-stimulus. It only remains, therefore, to accept the view that the defect is somewhere in the so-called "central reflex bow." The first experiments in this direction were by Flourens, who located the seat of the symptom in the corpora quadrigemina, where, according to his view, the nervous stimulus is transferred from the optic to the oculo-motorius. His opinion has been maintained up to the present time by ophthalmologists, and Magnus sketches the following course of the stimulus: Optic tract, corpora quadrigemina, nucleus of the sphincter iridis, and lastly oculo-motorius trunk to eye. That this view is false, Mendel believes to be shown by the experiments of Gudden, who removed the corpora quadrigemina without observing any interference with the pupillary movements. The seat of the nervous transmission can therefore not lie in them, and Gudden locates it in the external corpus geniculatum, without, however,

offering any proof in support of his belief. Mendel, in his experiments, removed the iris as completely as possible in new-born animals (dogs, cats and rabbits). Phthisis bulbi or suppurative destroyed the majority of such eyes; some, however, were preserved which showed during life no impairment of the visual act. All his results showed the following conditions:

In those cases in which, in consequence of destruction of the eye, the optic nerve atrophied, there was found in the brain a demonstrable atrophy of the external corpus geniculatum of the opposite side—results already published by Gudden and his pupils. In addition, however, he also found, even when the eyeball was preserved, all atrophy of the ganglion habenulæ of the same side. When in all cases during life the single abnormal symptom is absence of iris-function, and after death an atrophy of the ganglion habenulæ of the same side is found, one is certainly justified in believing that it is the center for the iris-movements. That it is a reflex center is evidenced by other appearances: as the fact that the pupillary fibres of the opticus in part enter the ganglion habenulæ.

Besides, Gudden, although regarding the external geniculate body as the iris-center, reports that removal of the anterior corpora quadrigemina causes no disturbance of the pupillary movements, such disturbance, however, following the removal of a "prominence" in front of them. This prominence is obviously the ganglion habenulæ. In support of his views Mendel mentions that Bechterew and others have in various ways come to the belief that the center for pupillary movements lies in the wall of the third ventricle, and especially at its posterior part. This belief corresponds fully to the experimental results obtained by Mendel.

The question as to the course of the fibres from the ganglion habenulæ to the oculo-motorius is answered by Mendel as follows: He found the ganglia habenulæ of both sides connected by a commissure, corresponding to the lowest part of the posterior commissure. This would be in accord with the physiological postulate that the pupils act symmetrically. The commissure showed a certain degree of atrophy on the side of the atrophic ganglion, which could be traced into the posterior commissure, so that according to this the course of the fibres from the ganglion habenulæ to the oculo-motorius would be through the posterior commissure. It is further remarkable that with changes in the pupils, the nucleus of the oculo-motorius was constantly normal. Mendel found, however, in the cell-accumulation of Gudden's nucleus, a difference between the two sides. This cell-group is situated below the oculo-motorius nucleus, and Mendel traces out the "central reflex bow" thus: Retina, optic nerve and tract, ganglion habenulæ of the

same side, posterior commissure, Gudden's nucleus, oculo-motorius, and sphincter iridis.

In man a decision will be only possible after careful examination in tabies and paralysis of the exact spot located by Mendel as the pupillary center. Some scattering observations, in part confirmatory, have already been made, though Moeli was unable, in cases of Robertson pupil, to detect any atrophy of the posterior commissure (a reference by Senator in the discussion of Mendel's paper). While the Argyll-Robertson pupil occurs in mydriasis as well as myosis, it is especially observed in connection with the latter.—*Brooklyn Med. Journal*.

## TREATMENT OF DIABETES MELLITUS.

Prof. Lepine (*Semaine Médicale*) writes as follows on this interesting subject:

It was formerly supposed that an infinitesimal quantity of virus was sufficient to cause, in an animal, a virulent disease. Later researches have shown that this idea is erroneous. There are certain ferments which act like poisons; a sufficient quantity is required to produce certain effects; a too small quantity of glycolytic ferment will not destroy a large amount of glucose. If we desire to obtain a clear view of the pathogeny of diabetes and the indications for its treatment, we must take account both of the amount of sugar to be destroyed and of the means of destroying it which are at the disposal of the patient. In other words, in the treatment of diabetes we must endeavor (1) to increase the destruction of the sugar, and (2) to diminish its production in the economy or its introduction with the food.

Can we furnish the patient with a glycolytic ferment? It is to be hoped so, though the efforts that I have made for a month are not very encouraging. Pancreatine does not possess an appreciable glycolytic power, and pilocarpine, which was relied upon to increase, to a certain extent, the pancreatic function, has not thus far succeeded in any case except that of M. Ianois. Although we cannot, just now, provide the diabetic patient with a ferment, we may try to increase its power. *In vitro*, carbonic acid diminishes it greatly; oxygen, on the contrary, acts favorably; advantage might be taken of this fact in treatment. Ozone, it is said, has been tried without effect; but that is no reason why further experiments should not be made.

It has long been known that alkalis favor the destruction of sugar. But when we recall the very small amount of bicarbonate of soda contained in a glass of Carlsbad water, of Bourbonne, or even of Vichy, and besides the manifest utility of these waters in certain cases, we are forced to the conclusion that they act otherwise than through their bicarbonate of

soda. Perhaps by exciting digestive activity they increase the production of the glycolytic ferment.

Without acting upon this ferment, we may increase the destruction of the sugar by muscular exercise. To Bouchardat belongs the credit of having first clearly shown this fact; but in his practice he carried it to excess. Diabetic patients cannot over-exercise with impunity. The physician should see to it that his patient does not take too much exercise. In general, massage is of more value than exercise; I have obtained excellent results from its employment.

I now pass to the consideration of the means of diminishing the production of sugar. Opium has long been recognized as one of the most valuable remedies in the treatment of diabetes. Some years ago M. Villemain recommended that belladonna be associated with opium. I have never perceived the utility of this suggestion, for the belladonna dries the patient's throat, and I have never seen a diabetic patient derive any material advantage from its use. Quinine, bromide of potassium, salicylate of sodium, and antipyrine have also rendered great service to a certain number of diabetics, but all of these drugs, except the bromide, have a common vice, upon which I have insisted for the last ten years, and that is, that while they diminish the production of sugar (which I was the first to prove experimentally), they also check its destruction. I may say to-day that this effect is due to the inhibitory action which these substances exert upon the glycolytic ferments.

We may understand, therefore, to what extent these agents are useful. The diminution of the glycosuria which they effect is really advantageous only to those patients in whom there is an over-production of sugar; in them they place an obstacle to an exaggerated denutrition. In other patients the diminution of the glycosuria, if it take place, is deceptive, since it may really aggravate the morbid condition by impeding the formation of the glucose necessary to maintain life.

To sum up, in diabetes we should increase the destruction of glucose; unfortunately, our abilities in this regard are exceedingly narrow, although we are at present acquainted with the glycolytic ferment. We can much more easily impede the formation of sugar, but the drugs used for this purpose unfortunately restrain its destruction, which is a serious fault. This gives an additional reason for insisting on abstinence from amylaceous foods. My views on this subject are too well known for me to repeat them here. I deem it advisable, however, to call attention to the inconveniences of the ingestion of too great a quantity of meat. Prof. Naunyn recently reported several cases of diabetes in which the increase in the meat diet

caused a re-appearance of the glycosuria, which disappeared under a moderate diet.

Another drawback, still more serious, of a too abundant meat diet is the acid diathesis, leading to coma if not promptly combated with alkalies in large doses.—*N. O. Med. and Surg. Journal. Lancet-Clinic.*

### THERAPEUTICS OF INTESTINAL ABSORPTION.

Dr. Leubuscher (*La Médecine Moderne*), arrives at the following conclusions: Quinine and morphine, even in the weak solution, diminish intestinal absorption. Morphine exercises the same action, even when it penetrates into the organism by the hypodermic method. A chol in very weak solution (one-half to two per cent.) increase absorption, but it rapidly diminishes it when the solution is made stronger. Glycerine has no action in this respect. Chloride of sodium in small doses increases absorption. Carlsbad water is without influence. Experiments made on man show that the iodide of potassium is eliminated slowly when it has been administered in concentrated alcoholic solution. In the urine the iodide is more rapidly and abundantly eliminated when it is given in a moderate amount of alcohol. In glycerin, water, or milk, the iodide is less rapidly eliminated by the urine.—*Therapeutic Gazette.*

### CHLORIDE OF SODIUM AS AN ANTISEPTIC.

Fritsch, of Breslau, recommends chloride of sodium in solution, carefully sterilized and warmed, for the purpose of douching wounds after operations instead of the antiseptics ordinarily in use. This solution he has employed in such operations as removal of uterine fibromyomata, ovariectomy, and in one Cæsarean section, in all cases successfully. In his opinion, cold atmospheric solutions should never be used in surgery, but always douches of chloride of sodium, sterilized and warm, 0.6 per cent. strength. He believes that by this means patients complain of less discomfort after the operation, and more quickly recover.—*Med. Press and Circular.*

### A NEW TEST FOR LEAD.

Brennstein says (*Pharm. Zeitung*) that if a solution of sodium phosphate be added to the suspected liquid, after the latter has been first acidified with acetic acid and then made ammoniacal, either an opalescent appearance or a strong turbidity will result, according to the amount of lead present.

## DIETETIC RULES IN DISEASES OF THE DIGESTIVE ORGANS.

Dr. J. Boas (*Deutsche med. Zeit.*, No 43, 1890) deals generally with the dieting of stomach and intestinal disorders. In considering diet in such conditions, three points must be looked to: (1) The constitutional condition and the state of nutrition of the patient; (2) the surroundings and customary habits of the patient. Thus, the dietetic treatment of the workman must be considered from another standpoint than that of the well-to-do. Thirdly, the most important point is the prescription of diet with the actual disturbance of digestion in view. The stomach, for example, gets out of order in two of its functions—the motor and the chemical; absorption in the stomach plays a very small part in the functions of the organ, so that an endeavor must be made (by the use of the stomach sound) to discover (1) whether there is a disturbance of the gland function, and whether there are fermentative processes going on; (2) whether the motor activity of the stomach is at fault; or (3) whether both these conditions are present. There are cases, for example, in which the stomach seems incapable, owing to deficiency of gastric juice, of digesting proteids; in these cases the digestion of carbohydrates may be perfect. Proteids in these cases must, therefore, be given in a prepared or semi-digested form (albumen, peptone). In these cases fat is digested with difficulty, or, rather is split up into fatty acids by the fermentation in the duodenum, and so does not enter the lymph channels in the usual form of an emulsion of neutral fat. Sodium chloride is useful in these cases, since it helps to form the hydrochloric acid of the stomach, which tends to stop fermentative processes. On the other hand, there are cases where there is hyperacidity in the stomach. In these cases proteids are exceedingly well digested and carbohydrates but feebly acted upon, so that the digested forms, such as dextrines, malted foods, etc., have to be prescribed. For insufficiency of the motor activity of the stomach, enemata of half a litre, with a proper diet, are beneficial.—*Supp. British Med. Journal.*

## TREATMENT OF HABITUAL CONSTIPATION.

Professor Nothnagel, in a recent lecture, reported in the *Wiener Med. Presse*, considers the three most important elements in the treatment of habitual constipation to be massage of the abdomen, electricity, and abundant exercise. Abdominal massage cannot be properly performed by the patient upon himself, the effort required causing contraction of the abdominal muscles, which prevents deep pressure and man-

ipulation. An efficient substitute for a masseur is a metal ball, weighing from three to six pounds and covered with cloth to prevent chilling the skin. The patient should every morning roll this over the course of the large intestines for five or ten minutes, beginning in the right iliac region. Professor Nothnagel believes that in the end massage is invariably of benefit, but that we must not expect much benefit for weeks and perhaps months. As cases of long duration react but slowly to almost all methods of treatment, we must (in order to guard against the results of fecal accumulation) have resort to laxative mineral springs, drugs, or enemata. Nothnagel believes it better, under these circumstances, to avoid drugs, and only to use an enema, either of pure water or one containing common salt, olive oil, or, preferably, glycerine. Acid fruits should be freely taken, along with a nutritious and easily digested diet. Should a vegetable laxative be called for, notwithstanding these remedial measures, Nothnagel recommends a pill composed of podophyllin and the extracts of aloes, rhubarb, and taraxacum.—*Philadelphia Med. News.*

It is said to be possible to restore one who is helplessly intoxicated to the almost complete use of his faculties in a very short time by administering to him a half teaspoonful of ammonium chloride in a tumbler of water.

## NEWS ITEMS.

**ALVARENGA PRIZE OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA.**—The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Senor Alvarenga, and amounting to about \$180, will be made on July 14, 1891. Essays intended for competition may be upon any subject in Medicine, and must be received by the Secretary of the College on or before May 1, 1891. Charles W. Dulles, secretary.

Eight patients are being treated in the Post-Graduate Hospital by Koch's lymph. Three of them are cases of lupus; four are cases of phthisis pulmonalis, and one laryngeal tuberculosis. The inoculations are in charge of Dr. W. C. Bailey, who was for a long time a student in Koch's laboratory, assisted by the Director of the Laboratory, Dr. J. H. Lineley.

Messrs. J. Calvet & Co. are to be congratulated upon the enormous advance that Messrs. Frederick de Bary & Co. have made with their wines during the year. In 1889 the importations amounted to 30,600 gallons in wood and 3,439 cases, and in 1890, 54,060 gallons in wood and 7,387 cases, being an increase in one year of over 85 per cent.

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**F. WAYLAND CAMPBELL, M.A., M.D., L.R.C.P., London.****ASSISTANT EDITOR****ROLLO CAMPBELL, C.M., M.D.**

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MONTREAL, FEBRUARY, 1891.

**THE KOCH TREATMENT.**

This is still a very absorbing topic among medical men, although fortunately, the excitement of the lay press has somewhat subsided. In the meantime, the treatment is being carried out with regard to the minutest details at the General Hospital, at the Western Hospital, and at the Hotel Dieu in Montreal; but owing to the great caution required in order to avoid fatal results, only small doses have been injected, and the improvement has accordingly been somewhat slow. But it is better to take some time in order that if no good is done, at least it may not be blamed for doing harm. An immense body of the profession is still opposed to it, the prevailing idea being that it will follow the fate of other highly vaunted methods of treatment. This of course, proves nothing against the remedy, because the general tendency of the profession is towards conservatism, and the very best methods which have come to stay, have nearly always been strongly opposed during many years by the majority of the profession, which however has adopted them when their merits have been sufficiently proven. This is as it should be. A great deal of loss of professional prestige has followed the too great credulity of practitioners in believing what has been said of different new reme-

dies, staking their reputation upon the success or failure of the latter.

There is, on the other hand, a small but compact body, composed largely of those who have seen the effects of the Koch treatment, and who firmly believe in its efficacy, either as a diagnostic agent or as a means of cure. The plan which Koch and his advisers have adopted for introducing the remedy to the profession, is to be commended; it has been placed first, not in the hands of those who would be likely to make money out of it, irrespective of its value, but rather in the hands of scientific workers, principally professors in universities and hospital attendants, who have the means for making accurate observations and who could have little or no object in exaggerating or depreciating its real value. A good deal of angry feeling and of ill natured remarks have been made upon Koch's determination to keep the method of its manufacture secret. Some of them state that he is not likely to divulge it as long as he and his two associates' exclusive possession of it continues to bring in what the Germans call the "colossal" revenue, of a million marks a year for himself and a quarter of a million apiece for his colleagues.

While we are anxious to see this, or any other remedy which has been vouched for by a scientific observer, given a fair trial, and while we shall be only too happy to record its brilliant success, we fear it will hardly realize the sanguine expectations of its inventor and his followers.

We may mention with some pride that two of the professors in Bishop's College, Drs. McConnell and G. T. Ross, were the first and only ones so far from the metropolis to visit Berlin for the purpose of observing on the thousands under treatment, the effects of the remedy and its method of employment. In response to the general feeling of the profession, that none of its members should continue to derive any profit, from a secret preparation, Dr. Koch has made a partial disclosure of its method of



manufacture. It would appear that a quantity of sterilized culture fluid is inoculated with colonies of tubercle bacilli, which rapidly multiply until they have exhausted all the nutrient material, when further multiplication ceases. During the process of growth, these bacilli which are among the lowest form of vegetable life, give off certain excreta, the presence of which in a cultivation fluid in sufficient quantities, may itself exhibit the growth of the tubercle bacilli, in a somewhat similar way that a certain quantity of alcohol in a solution of sugar and water will put a stop to the process of fermentation set up by the growth of the yeast plant, which is however, a little higher up in the scale of vegetable life. In case however, that any of the bacilli should remain alive in the cultivation fluid, the liquid is passed through a chamberlain filter to remove the germs. The excreted substance, is then extracted from the cultivation fluid by a 50 per cent solution of glycerine. It is this glycerine extract of the excreta of the tubercle bacilli which fills the little bottles of golden colored fluid sold for six dollars, for 75 minims or 5 grammes and which is diluted 100 to a 1000 times before being used. A great deal of care is exercised in the preparation of the liquid, and every lot is tested on at least, three tuberculous animals before being allowed to leave the laboratory. As Koch says himself, it would take a good bacteriologist six months to learn how to manufacture this liquid. So that taking all things into consideration, we think it better in the interests of humanity, that Koch and his friends should receive a handsome reward, than that so powerful a drug should be entrusted to incompetent manufacturers, who, in their greed for gain would lower the cost of production at the expense of accuracy. Our attitude, therefore, will be one of patient expectancy, feeling sure that we shall soon know the true value of the remedy, which is being so carefully experimented with by such a large army of trained and reliable observers.

#### DR. A. P. SCOTT.

The late A. P. Scott, M.D., was born in the Eastern Townships of this Province in the year 1859, and at an early age he studied for pharmacy, and subsequent to passing his pharmaceutical examinations he acted as assistant to several well-known druggists in Montreal, until finally in 1884 he entered into partnership with Mr. Avery Reed and started business for himself on St. Catherine street west, the firm being known as "Scott & Reed."

In the spring of 1883 he matriculated for the Medical Faculty of the University of Bishop's College, and entered that institution the same year. Through his four years' course at this university he proved himself a steady and persistent worker, and took a high standing in both his primary and final examinations.

In the spring of 1887 he graduated the degree of C.M., M.D., being conferred on him. Shortly after this he went to London, Eng., and there studied in the various Metropolitan hospitals, also presenting himself before the Royal College of Physicians and successfully passing the required examinations entitling him to the qualification L.R.C.P., Lond. He remained in London for about eight months, returning to Montreal late in the fall of 1887, and at once started practice.

In 1889 he was appointed Professor of Anatomy in the Medical Faculty of the University of Bishop's College, and continued to fill this very arduous position, to the satisfaction of all, up to the time of his decease. In his professional life he was a general favorite amongst his confrères, and was ever ready and willing to do a good action by giving his services even when well aware no return would or could be made. On the 29th of December, 1890, he took seriously ill (although for some weeks previous to this he had been feeling far from well) and was compelled to take to his bed, the cause of all this proving to be pleurisy. Several of his professional friends were in daily attendance, and he appeared to be progressing to a favorable termination, when on the morning of January 16th, 1891, on endeavoring to sit up in bed heart-failure suddenly set in, and before medical assistance could be secured he expired. He was married in 1884, his widow surviving him.

*Requiescat in pace.*



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## Original Communications.

### OBSTETRICS AND GYNECOLOGY.

By A. LAPHORN SMITH, B. A., M. D., Gynecologist to the Montreal Dispensary, Surgeon to the Women's Hospital, Montreal.

*Alexander's Operation.*—This operation, as you are aware, consists in cutting down on the external inguinal ring and finding the round ligament of the uterus as it emerges from the inguinal canal. The ligament is then drawn out until the uterus is brought forward close to the symphysis pubis where it is maintained by sewing the shortened ligaments to the inguinal canal. The operation is only suitable in cases of retroversion and retroflexion, in which there are absolutely no adhesions. It has also been employed in cases of prolapsus uteri, although the function of these ligaments or muscles is not to hold the uterus up but to tilt it forward, so that abdominal pressure will fall on its back and not on its anterior surface. The operation has met with varying success, being discarded by some while others have found it very successful. Alexander himself directs that the ligament should be sought for at the external abdominal ring, but at this point it expands into three thin tendinous bands and several operators have failed because they have caught up one of these expansions instead

of the whole ligament. Dr. H. P. Newman, of Chicago, has a very interesting paper in the *American Journal of Obstetrics* for March, in which he advocates a modification of Alexander's directions, cutting down on the middle of the inguinal canal and hooking the round muscle out with a strabismus hook. Dr. Edebohls, of New York, read a paper at the Berlin Congress last year advocating the same method, and Dr. Newman calls his attention to the fact that it originated with Dr. J. Frank, of Chicago, a year and a half previously. I would call the attention of both Dr. Newman and Dr. Edebohls to the fact that I travelled all the way to Battle Creek, Michigan, to witness this same modification of Alexander's operation practised by Dr. Kellogg three years previously, the operation being done moreover under cocaine anæsthesia. This case was Dr. Kellogg's sixtieth.

Laying aside the question of priority, which is a small matter after all, Dr. Newman gives a detailed report of seven cases in every one of which the results were very satisfactory, the patients having remained in good health up to the time of writing, two years having elapsed. The indications for the operation were as follows: Retroversion and prolapsus of both the uterus and ovaries in cases IV, V, and VII; proci-dentia with enlarged and tender ovaries in

case III; while cases I, III and V presented the usual menstrual disorders indicative of the severe types of uterine and ovarian displacements, and were upwards of ten years' standing: Cases IV and VII were of more recent date, being respectively one, three and five years' duration, but pain was a prominent symptom in both, and had resisted careful and persistent treatment. Case VI, of fifteen years' standing, had very naturally tired of routine local treatment, and, having personally observed the benefit accruing in other cases, earnestly requested the operation. Case II was the only one in which adhesions were any material obstacle to the restoration of the uterus to its normal position, though they existed in a minor degree in cases I, V and VII. As before stated, pessaries had been formerly tried in six of the seven cases but in each of those of ovarian complications they were a source of too great irritation to be tolerated, and in the remaining two had resulted in no appreciable benefit.

This operation has now been done many hundred of times and I believe with sufficient benefit to warrant its being placed on the permanent list of gynecological operations. Retroversion, as I have pointed out in several previous reports, is due to relaxation of the round ligaments. Most often this relaxation is due to subinvolution after delivery in women who are kept on their backs for a week or more, during which time the heavy uterus falls by gravity back on to the sacrum. Once the uterus gets there, everything is against its coming forwards again. These cases of retroversion ought never to happen, and they certainly would not if we instructed our patients to discard popular superstition and turn on their side and face and even to sit up on a night chair to pass water and defecate. I believe that faradization of these round muscles by placing one pole on the inguinal canal and the other under the muscle in the vaginal roof may yet do away with the necessity for an operation at all. The patient may besides do a great deal for

herself by assuming the knee chest position several times a day for a few minutes, and by acquiring the habit of sleeping on her face.

*The Care of the Lying-in Woman.*—Dr. Rutherford of Burlington, Vermont, has a sensible and very practical paper on this subject, in the *American Journal of Obstetrics*. Although I have already called attention to many of the principles he lays down, they cannot be brought to the attention of the profession too often. He sums up his paper as follows: 1. Keep the woman clean, locally and generally. 2. Give her all the nourishing food she can digest. 3. Keep her bowels open. 4. Give her plenty of fresh air. 5. See that she sits up to empty the bladder and rectum, and to nurse the child. 6. See that the uterus is in its normal position. 7. Never allow a woman to get up from child-bed with a retroverted uterus.

*The Treatment of Acute Anaemia by Infusion*, is the title of a paper by Dr. Bayard Homes of Chicago, in which the author strongly advocates the subcutaneous injection of a boiled and filtered solution of common salt containing six drachms to the gallon of water. From a quart to a gallon of this is injected under the skin of the back near the angle of the scapula by means of the Allan surgical pump or even with a fountain syringe at a sufficient height to give the necessary pressure. Although this does not actually replace the blood, it increases the volume of it so that the pressure of the blood in the aorta is increased, and thereby the coronary arteries receive enough blood, albeit of a poor quality, to keep the muscular organ contracting. Arterial pressure is the secret of the heart's blood supply, for it must be remembered that the heart is not allowed to drink one drop of the immense quantities of blood rushing through it; it can only get it through the coronary arteries. This is clearly proved by the agony of exhaustion evinced by the heart when its blood supply

is cut off by closure of the coronary arteries by disease of their walls.

*The Sources of Puerperal Infection.*—There are few practitioners who have had over four hundred confinements who have not had the misfortune to lose a case from puerperal fever. There are so many ways in which this accident may happen that the wonder is that in spite of all our precautions it does not happen oftener. Dr. Irwin Hance, of New York, believes that in most, if not in all cases, it is due to septic infection of a laceration of the cervix or perineum. I believe that the absorption of disease germs may take place from raw surfaces at any point from the perineum to the fundus uteri. At the meeting of the Canada Medical Association in Montreal eight years ago I pointed out that the seriousness of the case increases with the height of the raw surface, septic absorption from the placental site being much more serious than the same absorption from a lacerated perineum, and I still hold that view. In every case the temperature should be watched, any rise should be the signal for immediate irrigation of the parts with some disinfectant solution, such as 1-40 Condy's fluid, or 1-40 carbolic acid or creolin, or boracic acid, a drachm to the pint, etc. The perineum should be examined in every case immediately after the expulsion of the placenta, and any laceration, no matter how small, should be invariably sewed, with an ordinary needle and linen thread if you have nothing else. Many are in favor of immediately repairing the cervix if it is lacerated, but the majority rely upon strict asepsis and the chance of its healing itself.

If the rise of temperature is sudden and accompanied by a rigor, the case will be a serious one and the uterus is probably the site of the absorption. It should, therefore, be irrigated with an intrauterine catheter and its cavity filled with a long strip of iodoform gauze so as to ensure drainage.

But where does the infection come from? It may come from the husband who has

had connection with his wife a few hours before. It may come from a nurse who has had her hands in septic matter before coming to this case, or it may come from the doctor who does not believe in antiseptics. I have had at least one case of each kind, but strange to say the only two deaths in nearly five hundred confinements, were my 326th and 453rd, in which I had taken every precaution. I believe that there is another factor which is not sufficiently recognized and that is sewer gas infection. While I was attending women in the very poorest houses in the city where there were no closets, I hardly ever had a case of puerperal fever. It was only when I began to attend women in much better-plumbed and badly sewered houses of the better class that I began to have post partum rises of temperature. On mentioning this fact to Dr. Jos. Price, who is in charge of the Preston retreat, the best arranged lying-in hospital in the world, and where puerperal fever is unknown, he told me that he believed that sewer gas was a very common cause and for that reason all the closets and plumbing in the retreat were outside of the building, and that he had had better results from laparotomies performed in the hovels of the poor than was usual in the best appointed hospitals. I know of an outbreak of diphtheria of the genital tract, occurring in a lying-in hospital where an examination of the plumbing revealed a direct untrapped connection with the public sewer, conveying sewer gas directly into the building.

Dr. E. S. McKee, of Cincinnati, has a short but well written article in the same journal on "Obesity in its Relation to Menstruation and Conception." He points out that very fat women and even very stout men are very often sterile. He thinks that this is one of the explanations of the sterility of the rich and the fertility of the poor. Still more troublesome is the amenorrhoea and dysmenorrhoea which is so common in stout women. The pain, he says, is situated in the sacral region, in the majority of cases,

and begins before the flow and lasts until it ceases. In some cases there is vicarious menstruation. It appears that in these women miscarriages are very apt to occur. The most interesting point is the treatment. Rigid diet he says is *de rigueur*. Hydrocarbons and alcohol must be interdicted. Exercise, either active or passive, cannot be neglected. General and local faradization are of value. Laxatives are useful, but strong purgatives are bad because they cause anæmia. I must confess that these cases give me a great deal of trouble.

### TENDON REFLEXES.

Dr. Sternberg, of Vienna, read a paper on this subject, based on observations made on 1,500 patients in the clinics of Professor Meynert and Dr. Redtenbacher. The object of the experiment was to determine the "components" constituting the tendon reflexes, that is, the effects produced by shaking of the muscle, the tendons, the bone, etc., and to separate these various phenomena from each other. In this way he succeeded in showing that the so-called tendon reflexes consist of two phenomena, namely, a bone reflex and a pure muscle phenomenon, which, most probably, is also a reflex. The bone reflex consists in the fact that a shock to the bone, particularly in the direction of its longitudinal axis, irritates the nerves of the periosteum and the articular surfaces, and this produces a contraction of all the muscles belonging to the bone. The muscle-reflex consists in the fact that a stretched muscle becomes contracted when a shock is transmitted to it in the longitudinal direction. The tendon only plays a mechanical part. No reflexes originate from the nerves of the tendon. The existence of reflexes of the fascia cannot be proved. In contractures occurring after localized cerebral affections in various diseases of the spinal cord and in articular processes, the tendon reflexes are invariably increased. In contractures which occur in large cerebral hemorrhages, cerebral tumors and abscesses, uræmia and meningitis, and paralysis agitans, the tendon reflexes are never increased, and very frequently are diminished. These two forms of contracture can occasionally be distinguished by the tendon reflexes. In conclusion Dr. Sternberg pointed out that when all the precautions recommended by Schreiber and Jendrassik for the examination of the tendon reflexes were observed, complete absence of the tendon reflexes was much more seldom found than on less careful examination. —*British Med. Journal*.

## Society Proceedings

### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

*Stated Meeting, December 19th, 1890.*

F. J. SHEPHERD, M. D., PRESIDENT, IN THE CHAIR.

**A Large Aneurysm of the Aorta.**—Dr. Johnston exhibited this specimen, which had been sent by Dr. Tunstall of Kamloops, B. C. The specimen showed a diffuse dilatation of the ascending and transverse portions of the arch of the aorta. Springing from the right side of the arch, immediately above the aortic ring, was a sacculated aneurysm rather larger than the fist. The orifice of the sack was about  $2\frac{1}{2}$  inches in diameter, and the sinus of valsalva was involved in the dilatation, so that the segment of the aortic valves, which were thick and stretched out laterally, lay across the edge of this space. The sac lay in close connection with the posterior wall of the right ventricle, which was very thin in places, the muscle apparently being atrophied from pressure. Between the muscle fibres the whitish fibrous wall of the sack could be seen in places. Dr. Johnston wished to know if any set of symptoms or physical signs were known to be associated with aneurysm in this unusual situation.

**Chronic Calcifying Pericarditis.**—Dr. Johnston exhibited this specimen for Dr. MacDonnell. The autopsy showed considerable dilatation and hypertrophy of both chambers with universal adhesive pericarditis. Extending almost entirely round the base of the heart, in the auriculo-ventricular sulcus, was a calcified plate lying within the adhesion, evidently due to unabsorbed exudation. At one spot about a teaspoonful of thick, whitish, purulent fluid lay encapsuled between the adhesion and the heart wall. The calcareous plate was not firmly attached to the heart, but rather to the mediastinal tissue. It was evident, however, that it prevented the mitral and tricuspid muscular rings from properly contracting. The valve segments themselves were almost normal.

Dr. R. L. MacDonnell gave an outline of the history of the case. The patient had had scarlet fever in childhood. There were no heart symptoms until he had arrived to the age of 40, when he had begun to suffer from dyspnoea, præcordial pain, and dropsy of the feet. During his illness there had been severe attacks of epistaxis. In one of these, the posterior nares on the left side had been plugged. This operation had been followed immediately by acute otitis media ending in rupture of the drum membrane. There had subsequently been an attack of acute renal congestion with the passage of bloody urine.

The liver and spleen showed signs of enlargement, and there were evidences of congestion of both pulmonary bases.

*Gonorrhoeal (?) Endocarditis.*—Dr. Johnston showed the heart of a man, aged 34, a stone-mason, who had died in Dr. Molson's wards. There had been a history of repeated attacks of gonorrhoea, the last commencing two weeks before admission. At the autopsy the lungs showed extensive chronic bronchitis, with slight bronchiectasis; and multiple small fibrous nodules scattered throughout the lung substance, each being surrounded by a zone of black pigment. The heart was dilated and the muscle wall of both chambers somewhat thick. A large rough, ragged, fibrinous vegetation was found at the base of the middle segment of the aortic valve; this was traced directly through the region of the membranous septum between the ventricles, and extended to the adjacent part of the tricuspid valve, upon which a similar vegetation existed; the intervening tissue was softened and necrotic. The remaining portion of the aortic and tricuspid valves seemed perfectly healthy. The other valves looked normal. The heart muscle showed no change beyond slight fatty degeneration of some of the papillary muscles. No infarcts or abscesses were found anywhere in the body. The urethra showed some thickening near the meatus and about the bulb, but was free from all appearance of acute inflammation. The right ankle and both knee-joints were examined and found normal.

Dr. Johnston was surprised to find, on making cover-glass preparations from the vegetations on the valves, that on staining with watery fuchsin a number of small diplococci were found, having a strong resemblance to gonococci in size and shape. They further resembled gonococci in not staining by Gram's method, others differing from all cocci which Dr. Johnston had found in previous cases of endocarditis. They were not obtained in cultures in pure agar-agar. On the other hand, while they sometimes occurred in small groups, of which each pair of cocci was slightly separated from the neighboring ones, they did not lie in the substance of the cells when these were present. They also stained less intensely than gonococci in alcoholic methylene blue solution. Scrapings from different parts of the urethral mucosa did not show any gonococci or organism at all resembling them. None of the other tissues were examined for bacteria. Dr. Johnston did not believe these organisms were proved to be gonococci, as possibly the peculiar staining might be due to degenerative changes in some other diplococcus. Still, as a case had been reported where gonococci had been described as occurring in the vegetation, the similarity, if not identity, of these organisms to them was of importance. He had not had any sterilized human serum on hand at the time of making

this autopsy, and had not hoped for positive results from the cultures in any case.

Dr. MacDonnell, who reported the case, remarked that the patient had been admitted to Dr. Molson's wards in the Montreal General Hospital, on December 12th, 1890, complaining of cough, dyspnoea, and sleeplessness. There was a history of intemperance; no history of syphilis, but he had on several occasions contracted gonorrhoea, and had twice been under the care of Dr. Molson for gonorrhoeal rheumatism. Six months ago the patient contracted a fresh gonorrhoea, which was followed by a fresh attack of rheumatism, the ankles, knees and wrists being affected. Apart from his affection he had not been in good health for some two months. He had lost weight, had shortness of breath, and pain in the left side of the chest, and a distressing cough with free expectoration. He recovered from the attack of gonorrhoeal rheumatism, exposed himself afresh to contagion, two weeks before admission, and the discharge had returned with increased vigor. There is no history of rheumatism or scarlet fever. Parents were both alive. One sister died at nine months of convulsions, one at 14 years of an acute illness lasting but two days, and a brother died at 30 of inflammation of the lungs. The present illness began two weeks ago with cough and dyspnoea. On admission at noon, Dec. 12th, 1890, the temperature was  $102\frac{1}{2}^{\circ}$ , pulse 120 (weak), and respirations 48 (labored); cough distressing; deficient expansion on right side, with dulness on percussion and weak breathing over a considerable area at the back of both lungs from the angle of the scapulae downwards, and mucous râles were heard over the whole back. Owing to the noisy breathing the heart-sounds could not be distinguished. Nothing was noted beyond accentuation of the second sound. Patient died suddenly at 3 a. m. next day (13th).

Dr. Bell asked if the gonococci had been recognized outside of the genito-urinary tract.

Dr. Jas. Stewart inquired if the joints had been examined in the present case for gonococci.

Dr. Johnston, in answer to Dr. Bell, stated that gonococci had been met with in cases of salpingitis and in gonorrhoeal arthritis. To Dr. Stewart's question, he had not examined the joints for gonococci, as they appeared perfectly normal.

*Case of Rhinoplasty.*—Dr. Jas. Bell brought the patient before the Society and gave the following history: Five years ago, A. S., aged 25 years, lost the cartilaginous and soft parts of the nose, with the exception of a portion of the alae at each side, from a destructive ulcerative disease said to have been lupus. An attempt was made in the London Hospital, England, to restore the nose by the Tagliacotian operation, the left forearm being used for this purpose, but resulted in a complete failure. On admission, portions only

of the alæ were left of the nasal structures anterior to the lower extremities of the nasal bones. These were connected to the cheeks by large keloid cicatrices. The unsupported nasal bones had fallen down, so that the anterior edge of the vomer could be felt projecting between them. The inferior (free) margin of the vomer from which the triangular cartilage had been removed by the ulcerative process was covered by healthy mucous membrane. There was great redundancy of the upper lip, which was made more apparent by the spreading of the alæ nasi. The operation consisted in fitting into the gap described a section from the central portion of the upper lip. The edges of the gap were pared from above downwards, beginning at the centre. The mucous membrane was also pared from the free edge of the vomer. A section was then removed from the center of the lip through its whole thickness, and about an inch in width at its free margin and three-quarters of an inch in width at the base of the flap. The flap was then turned upwards and fitted into the gap by making a cross section through the skin surface near the mucous edge of the lip and splitting it in both directions so that in its centre it was attached to the vomer, while externally the edges of the mucous surface were attached to the skin margin, the parings from which were reflected downwards and attached to the edges of the base of the flap, which formed the calumna nasi. Union by first intention took place throughout, and an excellent result followed, with but slight shrinking of the implanted flap. In two months the mucous surface had become pale and resembled the skin so closely in other respects that it could only be recognized on careful examination.

*Plastic Operation for Severe Burn of Face and Neck.*—Dr. Shepherd exhibited a patient on whom he had operated for deformity of the neck and mouth, following a severe burn in infancy. The patient was 20 years of age, and when he entered hospital his chin and lower lip were fixed to the sternum, causing the whole head to be bent forward and obliterating the front of the neck. The burn had involved the greater part of the chest and also the sides of the neck and arms. The lower jaw, from continued tension of the scar had been pulled forward and protruded several inches beyond the upper, giving the man a hideous appearance. Several operations were performed. The neck was first freed by a dissection which reached almost from ear to ear, and when granulation had been established, grafting after Thiersch's method was performed. The protruding lower jaw was then excised and the lip restored by Teale's operation. The result was good; the patient's appearance was much improved, and he could use his mouth.

*Removal of an Osseous Body from the Knee.*—Dr. Hingston exhibited a fragment of bone which he had removed from the knee-joint of a

young man. The symptoms were similar to those commonly met with when loose cartilages are present. An open incision was made and the substance removed. On examination, it was found to be distinctly bony in structure. Its dimensions were about one inch by half an inch.

Dr. Roddick asked if there was any history of injury.

Dr. Shepherd remarked that the specimen looked like a fragment of bone sometimes found in gouty subjects.

Dr. Hingston replied that there was no history of injury or gout.

*Chorea, its Relation to Rheumatism and Treatment.*—Dr. G. A. Brown then read a paper on this subject.

*Discussion.*—Dr. MacDonnell considered the paper of practical interest. He referred to the great frequency of the rheumatic history, when looked for, in many cases of chorea. Rheumatism in children more frequently manifested itself by tonsillitis, chorea, erythema, and various other manifestations of the rheumatic diathesis than by painful and swollen joints.

Dr. Jas. Stewart had no doubt but that rheumatism had a marked influence in the induction of chorea. He considered, however, that there was another element which predisposed to chorea, and that was the condition of instability of the nervous centres.

Dr. Mills spoke of the causes of chorea in dogs. These were mainly reflex and, in his experience, not dependent upon organic disease.

Dr. Gurd had found the iodide of iron with arsenic very beneficial in the treatment of chorea.

Dr. Johnston remarked that he had only met with brain lesions in one case of chorea out of about ten examined in man and animals. This was a case where he had performed an autopsy for Dr. Jas. Stewart, and a number of small cysts had been found in each corpus striatum.

Dr. Hingston had found ordinary chorea to disappear in seven or eight weeks without medicinal treatment.

Dr. Bell thought that the name chorea was rather indefinite, that it was made to include many cases of a definite pathological lesion.

Dr. Brown, in his reply stated that he had wished to show the close relationship between rheumatism and chorea, nevertheless admitting that other causes may enter into its production.

*Stated Meeting, 9th January, 1891.*

F. J. SHEPHERD, M.D. PRESIDENT IN THE CHAIR.

*Ruptured Tubal Pregnancy.*—Dr. Armstrong showed this specimen which he had removed from a patient aged 35. Her previous pregnancy, nine years ago, was followed by pelvic symptoms. She was then delivered of a full-grown child. In May last, the patient believed

that she had had a miscarriage, as there had been a bloody discharge from the vagina for seven weeks. On the 5th April, five weeks after her last menstrual period, whilst out walking, she was seized with severe pain and faintness, and had to be driven home. In two or three days she recovered sufficiently to be able to go about the house. On the 14th April she had another attack. On the 16th the patient felt better and went out, when she was seized with a third attack. Dr. Armstrong, who then saw the patient, found, on examination, the uterus pushed up and to the left. In the right side of the pelvis a large mass could be felt about the size of a cocoanut. The tumor extended above the brim of the pelvis, and could be detected by external palpation. There was a little bloody discharge from the vagina. The diagnosis was hematocele due to a ruptured tubal pregnancy. This was confirmed subsequently by Dr. Perriego. The symptoms not being urgent, it was deemed advisable to await developments. The patient improved, and in a few days was up. She remained well until August, when chills and hectic fever set in, and the tumor felt considerably softer. On the 1st September Dr. Armstrong opened the abdominal cavity. The right Fallopian tube was ruptured and lay in the sac, which was filled with blood-clot. The sac was easily enucleated, and the tube ligatured and removed. The patient was now perfectly well. Dr. Johnston had examined the specimen and found structures resembling chorionic villi. Dr. A., dwelling upon the etiology of the case, referred to her history of pelvic pain some nine years ago, when possibly, there may have been desquamative salpingitis.

Dr. Wm. Gardner remarked that these cases were far from rare, and that they were not always fatal. In the present specimen the sac was somewhat remarkable. He wished to know if there were any evidence of ovarian structure in the sac. He had frequently found what he believed to be the ovary expanded by blood-clot.

Dr. Johnston replied that the ovary was free from the sac.

Dr. Shepherd wished to know what symptoms led to the operation.

Dr. Armstrong answered that from the softening of the tumor, together with signs of hectic fever, he had considered it advisable to operate.

*Tuberculous Arthritis of the Knee-joint.*—Dr. Wyatt Johnston exhibited this specimen. Sequestra of necrosed bone existed at the head of the tibia and the condyles of the femur. The opposing surfaces of these sequestra were very dense, and showed eburnation.

*Chalicosis.*—Dr. Johnston also showed the lungs of a stonemason. A large number of small, firm, fibroid nodules, the size of shot, were found beneath the pleura and throughout the lung substance. These nodules were gray in the centre, and were surrounded by a zone of

black pigment. Analysis of the lung by Dr. Rutan showed that 8.4 per cent. of the dried lung was composed of mineral ash, of which over 50 per cent. consisted of silica. Traces of iron were also present.

*Thrombosis of the Superior Longitudinal Sinus and left Renal Vein following Scarlatina.*—Dr. Johnson exhibited this specimen for Dr. Armstrong. The patient, a female child, aged 2½ years, had died six weeks after the onset of an attack of scarlatina with broncho-pneumonia. A large, firm, adherent, darkened thrombus completely filled the superior longitudinal sinus and extended into the adjacent central veins. The brain was perfectly normal. The left renal vein and its principal branches also contained adherent red thrombi. The ovarian veins were not examined.

Dr. Armstrong related the clinical history. The child was two years and a half old. It had been delivered with forceps, and from within a fortnight of its birth it had suffered from convulsive seizures, which had occurred from once to six times a day. Various modes of treatment, including circumcision, had been tried without effect. The parents had persisted in the belief that the forceps was to blame for the unhappy condition of the child. Death was caused by scarlet fever and broncho-pneumonia.

Dr. Mills said that it was difficult to see how forceps could affect the sinus. He thought that more than the blood must be taken into account to explain the convulsive seizures.

Dr. Johnston remarked that thrombosis in the veins of children was not uncommon, especially in the renal vein which probably extended from the spermatic vein.

*A case of Abortive Typhoid Fever, with a Severe Relapse.*—Dr. J. A. Springle related the history of the case. The patient, a young man aged 19, had consulted him on the 25th September last, with unmistakable symptoms of typhoid of about the seventh or eighth day of the fever. On the following day rose spots were observed, and on the tenth day of the illness there was retention of urine. On the morning of the eleventh day the patient was extremely jaundiced, but was feeling quite well. His temperature, which had ranged between 100° and 102°, had fallen to 98½°, and all the abdominal symptoms had disappeared. Retention of urine, however, persisted. This condition lasted until the end of the thirteenth day, when he recovered power over his bladder, and the jaundice gradually disappeared. His pulse and temperature had been normal since the eleventh day. His general condition was so much improved that he was allowed to partake of solid, though light food. He steadily improved, and on the seventeenth day was out for a short walk. On the eighteenth day he complained of not feeling well, and on the following morning presented all the symptoms of a severe relapse. For the first



week of the relapse the fever ranged from 100° to 105°; pulse 100 to 140, markedly dicrotic. The spleen was enlarged, and there was great illiac tenderness; vomiting was incessant for forty-eight hours. Towards the end of this week hemorrhage set in, small in quantity at first, but subsequently becoming very profuse. There was considerable abdominal distention. During the following week there was vomiting, retention of urine, and a slight diarrhoea, which lasted forty-eight hours. A profuse rose rash was observed over the chest. The tympanitis, hemorrhage and other graver symptoms subsided towards the end of the week. From the end of the third week the patient progressed favorably. The total period of the pyrexia for the relapse was thirty days. Dr. S. could not explain the coincidence of jaundice, furthermore than the patient had had fever and ague five years ago, and since then, his skin had at times been discolored, but not of the decided tint observed in this illness.

Dr. MacDonnell considered this case an interesting one. That many cases of abortive typhoid were put down as febricula, he had no doubt. Jaundice in typhoid fever was not rare, though not often seen here. He mentioned a case of a patient in the hospital, who developed jaundice after a relapse of typhoid fever.

*A Method for the Quantitative Estimation of Acetone in Urine.*—Dr. Ruttan, in referring to the various methods of detecting acetone in urine, said he had no hesitation in recommending Leben's iodoform test as superior to all others both in the delicacy of the reaction and in the ease with which the test could be applied.

If much acetone be present it can, with little experience, be detected by applying the test directly to the filtered urine. This method is rendered more delicate by first precipitating the earthy phosphates by caustic soda or potash, and then applying the test. The test consists in adding to the urine a few drops of a strong solution of iodine in potassium iodide, and then adding an alkali (caustic soda, etc.) until the solution is just decolorized. A yellow opacity with precipitation of iodoform occurs if acetone be present. Nothing else that occurs in urine, except acetone, is able to give this precipitate of iodoform without warming.

When but minute traces (less than 0.05 per cent.) are present, the urine should first be made acid with sulphuric acid and distilled. When half the urine has been distilled, all the acetone has been found to be in the distillate.

He then demonstrated the application of a piece of apparatus he had constructed to use in connection with his method of determining the quantity of acetone in urine. This method depends on the fact that with the same quantity of iodine and alkali, variations in the quantity of iodoform produced in Leben's test are caused by a proportionate increase or diminution of the

acetone. He used 5 c.c. of a standard strength of iodine, 10 c.c. of similar strength of caustic potash, and 1 c.c. of the distillate of the urine to be tested. The iodoform produced is dissolved up by shaking the mixture in a sort of separating flask with pure ether, then the aqueous mixture below is run out, and the ethereal solution measured in the flask as it is graduated from the tap up. Half the etherized solution is run out on a weighed watch glass and allowed to evaporate at ordinary temperature. The iodoform left is weighed, and the quantity so obtained multiplied by 0.55 will equal the acetone in 1 c.c. of the urine.

In a chemical laboratory from forty to fifty estimations could be made in a day, and the percentage of acetone determined to the third place of decimals with perfect accuracy.

*Acetonuria.*—Dr. Ruttan and Dr. Wyatt Johnston read a paper upon a fatal case of cerebral apoplexy, in which sugar and acetone had been detected in the urine.

The patient, a man aged sixty-seven, had been under the care of Dr. R. L. MacDonnell, who had been his medical attendant for the last seven years, and had repeatedly examined the urine during that time, always with negative results. The fatal illness had set in suddenly with an apoplectic seizure. Coma had set in immediately, and had lasted for twenty-four hours. The urine was found at the time of the seizure to contain 1.7 per cent. of sugar, which had increased next day to 2.4, and then had disappeared entirely. Acetone to the amount of 0.31 to 0.37 per cent. was found associated with the sugar, and the quantity had persisted for five days after the sugar had disappeared.

The patient had partially recovered consciousness, and had complained of severe occipital pain. Death had occurred suddenly and unexpectedly on the twelfth day of the illness. The condition had been regarded as one of diabetic coma, but at the autopsy an extensive cerebral hemorrhage was present, involving the whole of the base of the brain, but most extensive over the medulla. Dr. MacDonnell concluded from this instance that in every case where there is sugar in the urine it was not necessarily a case of diabetes.

Dr. Mills said that the present case appeared to him like one that was being gradually poisoned from some retained substance in the body, which was unknown to us, and deranged metabolism generally.

Dr. Johnston stated that in view of the post mortem, poisoning by acetonuria could not be regarded as being the cause of any of the symptoms. The hemorrhage had produced both the coma and the acetonuria. The blood obtained at the autopsy was free from acetone. The death was probably due to a recurrence of the hemorrhage.



Dr. Ruttan thought that the urine of the patients suffering from coma should be examined for acetone, as well as for sugar and albumen.

*Stated Meeting, January 23rd, 1891.*

F. J. SHEPHERD, M. D., PRESIDENT, IN THE CHAIR.

*Epithelioma of the Mouth.*—Dr. Johnston exhibited this specimen for Dr. Bell. The tumor, the size of a walnut, was situated behind the symphysis of the lower jaw. The surface was ulcerating. The growth infiltrated the sub-mucous and muscular tissue in its neighborhood and had extended into the periosteum. Microscopic examination showed the growth to be an epithelioma. At the autopsy, performed four days after the operation, the wound was granulating. No thrombi were found in the vessels of the neck or the pulmonary arteries. The lungs showed a patch of acute pneumonia, as large as an orange, in the upper lobe of the left lung. At the right apex was an extensive fibroid area, evidently of tuberculous origin, in the centre of which was a small cavity the size of a cherry, with smooth walls, communicating directly with a bronchiole. There were no signs of food in the air passages.

Dr. Bell briefly related the history of the case. The patient was 59 years of age, an old soldier and a smoker. His trouble dated back to May last, but it was only in August that his mouth became sore. The patient's condition was rather poor. There were signs of old tubercular disease at the upper lobe of the left lung. The patient died on the morning of the third day after the operation, somewhat suddenly, from an apparent syncopal attack.

Dr. Johnston believed the cause of death to have been septic pneumonia, without any mechanical cause.

*Hæmatocele of the Testis.*—Dr. Bell, who showed this specimen, remarked that it had come on suddenly, in one night, whilst the patient was ill in bed. The tumor had been tapped at the hospital, and a cellulitis of the scrotum had followed. Dr. Bell made an incision into the scrotum and found the visceral layer of the tunic dilated with blood-clot. On section, the testicle was found considerably injured by pressure. Dr. B. remarked that it was unusual to find hæmatocele without any history of traumatism.

Dr. Roddick agreed with Dr. Bell as to the rarity of cases of hæmatocele without traumatism. When this case had been tapped, a grumous and bloody serum escaped which led Dr. R. to believe that a cyst had been punctured, particularly as the testicle could not be felt.

*Multilocular Cyst of the Ovary.*—Dr. Lapthorn Smith showed this specimen, which weighed 45 lbs., which he removed from a wo-

man aged 31. There were a great many adhesions. Hemorrhage had been very profuse during the operation, and the abdomen had to be reopened the following day owing to a recurrence of the hemorrhage, due to a small fissure between two segments of the pedicle. The patient was very weak from the loss of blood, and died three and a half days after the operation.

*Dilated Tubes.*—Dr. Smith also exhibited this specimen, on which he would report at a later date.

*Bone-marrow and Liver; Pernicious Anæmia.*—Dr. Johnston showed the femur of a man, aged 50, who had died in Dr. Molson's wards from pernicious anæmia. The medullary canal was filled with red lymphoid marrow, except in the lower third, where traces of the fatty marrow still existed. The liver, from the same case, showed a large amount of yellow brown pigment in the peripheral zone of the lobules. This pigment gave a marked iron reaction on treating the sections with ferro-cyanide of potassium and hydrochloric acid. The skin and subcutaneous tissues were stained a lemon-yellow tint. Numerous nucleated red blood corpuscles were found in the blood.

*Plastic Operation for Extrophy of the Bladder.*—Dr. Shepherd exhibited a case of extrophy of the bladder in a boy aged 12, on whom he had operated, and restored the anterior wall by Maury's operation. A large oval flap was first taken from the perineum and fixed beneath a short flap dissected from above. After union had taken place, the sides of the flap, which were unattached, were further dissected down and fixed beneath short lateral flaps. In the first operation, a hole had been made in the centre of the perineal flap for the rudimentary penis. The parts all united well except at the upper part, where a small portion sloughed and allowed urine to exude, and so prevented skin-grafting being to any large extent successful. This fistulous opening had, however, been closed by a recent operation, and now the bladder was completely covered and the parts had all skinned over. The boy was able to retain a couple of ounces of urine, and the double hernia which had previously existed as the parts contracted was completely cured.

Dr. Roddick considered the operation admirable. He had operated on a young woman some years ago for extrophy of the bladder, and had selected Ayer's method. A large square flap had been dissected from the abdomen above the bladder and turned down with the cuticular surface innermost. The raw surface was subsequently covered over by lateral flaps. The operation thus far had proved very successful. The patient left the hospital with the intention of returning in a few weeks to have the operation completed. She failed to do so. It was learned that she had got married.

*Study of Koch's Treatment in Berlin.*—Dr. G. T. Ross read a paper on the above subject.

Brief reports of cases submitted to Koch's treatment in the Montreal General Hospital were made by Drs. Roddick, MacDonnell, Jas. Bell, and Johnston.

Dr. Roddick was not yet convinced that the results would be as good as predicted. He agreed with Dr. G. T. Ross that the remedy was a dangerous one, and that all experiments should be made in hospital.

Dr. R. L. MacDonnell stated that recognising the responsibility resting upon those who, occupying positions in public institutions, were entrusted with the experiments with the Koch fluid, he had endeavored to fulfil his duty towards the profession and the public. The profession regard with eager interest the result of the work. It was therefore necessary that the members of it should be put into full possession of all the facts of the cases on trial and the records of the observations made. The profession could then judge fairly of the result. Towards the public, it was the duty of those using the fluid to use the utmost caution. To pronounce a decided judgment upon the merits of the treatment was not possible, and therefore the members of the profession should be slow in the expression of opinion on the matter. Unless care were taken, the Koch treatment would develop into a form of cruel quackery. He had endeavored to secure cases in which (1) the diagnosis was beyond a doubt; (2) cases which had been under observation previously, so that a just comparison of their condition before and after treatment could be made. Three cases were selected, and the treatment was commenced on the 12th January:—

*Case 1.*—A boy of 18, who had been six weeks in hospital in early autumn. The temperature had always been normal, or nearly normal, never having reached 100°. The symptoms were debility, loss of weight, cough. The physical signs were indicative of consolidation at the right apex, involving the upper third of the lung, and commencing consolidation of the left. Tubercle bacilli and elastic tissue in the sputum. For a week before the injections were made the temperature was taken hourly. It never went as high as 100°. The result of the treatment had been little more than negative. A reaction has occurred, inasmuch as it is plain that the temperature rises to a point higher than was observed before, after each injection. Up to date, Jan. 23rd, the patient observes no change. The physical signs are unchanged. The sputum has been examined every day, but no change in the number of bacilli has been noticed. The patient has lost weight since he had been under treatment.

(To be continued.)

## Progress of Science.

### WASHES AND SPRAYS IN THE TREATMENT OF NASO-PHARYNGEAL CATARRH.

By E. Baldwin Gleason, M. D., Surgeon-in-Charge of the Department for Diseases of the Nose, Throat and Ear of the Northern Dispensary.

The secretions of the nasal mucous membrane are derived from its mucous glands, and also almost directly from the numerous blood-vessels of the mucous membrane, especially those of the so-called erectile tissues covering the turbinated bones. Whenever a nasal discharge consists of a clear, watery fluid—which in hay fever or nasal hydroporrhea is often very abundant—the fluid comes from dilated blood-vessels and indicates vasomotor paresis, and may be the reflex of irritation of some of the sensory nerve-filaments in the nasal mucous membrane. In such cases, irritating astringents, especially if applied in the form of a powder, invariably do harm and increase the watery discharge. If, however, a 4 per cent. solution of cocaine be applied to the interior of the nose, contraction of the vessels is brought about and the discharge ceases. The effects of the cocaine in thus controlling the discharge may be usually maintained for several hours by following the cocaine application, by spraying the interior of the nose with an atomizer containing a 4 per cent. solution of antipyrin. The nasal stenosis and excessive secretion of acute coryza are at once relieved by this treatment, which may be repeated as often as twice or thrice a day, with the result of obtaining a speedy cure of "cold in the head."

A patient, during an attack of fever, should be directed to saturate small pieces of absorbent cotton with a 4 per cent. solution of cocaine and place one loosely within each nostril, and to renew the application as necessary to obtain complete relief from his more distressing symptoms. An efficient wash for the nose and pharynx to be used by the patient at home should have the following characteristics:

1. It should be alkaline.
2. Its specific gravity should be a little less than 1027, or about that of blood serum.
3. The temperature of the wash when used should not be below 100° Fahrenheit.
4. It should be an agreeable odor, taste, and appearance.
5. It should be antiseptic.
6. It should be so medicated as to be appropriate to the condition of the mucous membrane of the nose and pharynx of the patient for whom it is prescribed.

The specific gravity of the wash should be about 1027, or that of blood serum, because the Schneiderian mucous membrane is exceedingly

thin and vascular, and presents the most favorable condition for the occurrence of osmosis and exosmosis. If the specific gravity of a "nose-wash" is much less than that of blood-serum its use is followed by osmosis of the more fluid parts of the wash into the capillaries of the mucous membrane; while, if the specific gravity of the wash is much above that of blood-serum, its use is followed by exosmosis from the capillaries of the mucous membrane. In either case there is produced an irritation of the sensory nerves of the mucous membrane, indicated by smarting sensations or actual pain lasting some moments, and soon followed by swelling of the erectile tissues and a "stuffed up" sensation in the nose.

When masses of partially inspissated mucus are retained within the nasal chambers they soon begin to undergo putrefactive changes and the products of these changes are very readily absorbed through the thin, vascular, mucous membrane.

A 20 per cent. solution of cocaine, when applied on absorbent cotton to the nasal mucous membrane, produces a more rapid, but, at the same time, more superficial and less profound local anæsthesia than when a 4 per cent. solution is used for this purpose.

Applying the foregoing considerations in the construction of a formula for a nose-wash to be used by patients at home, we may make a wash that is bland and unirritating, alkaline, antiseptic, and of the right specific gravity for use within the nose in simple chronic or hypertrophic catarrh:

R Sodii bicarb.,	
Sodii biborat.,	aa ʒj.
Sodii salicylatis,	gr. iij.
Glycerinæ,	fʒj.
Thymol.,	gr. j.
Menthol.,	gr. ss.
Aquæ,	ad fʒij.

M. Sig.: Add to a quart of water and use as a wash.

If to the above formula table salt or extract of licquorice (1 drachm of either) be added, we still have a cheap and effective wash, whose solid ingredients may be prescribed as a powder, a heaping teaspoonful of which added to a pint of water will form a wash of the required strength; or the powder may be compressed into tablets of such a size that one of them added to 2 ounces of water will form an efficient wash.

Powders used as a "snuff" irritate the nose mechanically, and sometimes bring about a condition of affairs resembling that of hay fever. Simple chronic rhinitis is then, perhaps, best treated by the patient's use, two or three times a day, of a bland and unirritating alkaline wash, and the application by his physician of an alterative and somewhat stimulating solution to the inflamed Schneiderian membrane two or three times a week to bring about absorption of the

products of inflammation within and beneath the structure. The following solution, applied to the nasal mucous membrane by means of a piece of absorbent cotton wrapped around the end of a probe, answers very well for this purpose:—

R Iodi,	gr. viij
Potassii iodid.,	gr. xxiv.
Glycerine,	fʒss.

The solution, when applied to the Schneiderian membrane, should produce a slight amount of irritation, or the proportion of iodine and iodide of potassium to the glycerin should be increased. Treated in this manner, an apparent cure of simple chronic rhinitis can frequently be brought about within six weeks.

In atrophic rhinitis, however, where mucous glands and blood vessels are shrunk or destroyed, and the mucous membrane itself is thin, pale, lacks sensibility, and is covered by crusts of inspissated mucus, an irritant wash for the patient's use at home would seem desirable. If the proportion of water in the wash mentioned above be decreased, it becomes somewhat irritating, and its specific gravity is, at the same time, so much increased as to favor exosmosis from the vessels and thus decrease the tendency to the formation of crusts. In the treatment of atrophic rhinitis, the wash should be used two or three times a day, and be of such a degree of concentration that it will produce a slight smarting sensation each time it is used. The stimulation of the atrophied mucous membrane may be maintained during the day by the use of an irritating powder, which the patient can carry in a box in his pocket and use as a snuff four or five times a day. The following formula has answered very well for this purpose:—

R Argenti nitratis,	gr. ij.
Amyli,	ʒiiss.

The use of washes by means of the nasal douche has been very justly abandoned as dangerous, from the fact that, if obstruction of the nasal chambers exists that interferes with the free escape of the wash from the post-nasal chamber, some of the fluid may be forced through the Eustachian tube into the ear and produce acute otitis media. In most cases of naso-pharyngeal catarrh, simply sniffing the wash from a cup or hollow of the hand through one nostril into the fauces is sufficient to cleanse the nose and naso-pharynx of their accumulated mucus. An atomizer throwing a coarse spray may also be used for the same purpose, the spray being allowed to play through the nostril into the naso-pharynx.

When diphtheritic or croupous inflammation has covered part of the mucous membrane of the nose or pharynx with a false membrane, it can often be loosened from its attachments by the use of an alkaline wash, and here simple liquor calcis answers a useful purpose in rendering the membrane more friable and easy to detach. It

may be used with an atomizer, or injected into the nose of a child with a medicine-dropper or small syringe, and in the same manner a 1 to 2 or 3000 solution of corrosive sublimate may be used as a germicide and antiseptic. In relaxed conditions of the mucous membrane, for example the relaxed fauces of smokers and others, astringents are indicated. Here a solution of sulphate of copper, 2 grains to the ounce of water, used with an atomizer upon the fauces once or twice a day, gives immediate relief, and often enables the physician to bring about a cure of this annoying affection without resorting to amputation of the uvula. Where syphilitic ulcerations of the nose, pharynx, or larynx are present, zinc chloride seems to act well as an astringent. If 2 grains of the salt and 10 grains of extract of liquorice be dissolved in 2 ounces of warm water, the solution may be used with the post-nasal syringe, with the result of abating any fetid odor that may be present, diminishing the discharge, improving the condition of the ulcer, and decreasing the inflammation and swelling of the surrounding mucous membrane.—*Med. Bulletin. Med. Review.*

#### OBSERVATIONS ON THE MOVEMENTS OF THE INTESTINE OF MAN.

Rosbach (*Deutsch. Arch. f. Klin. Med.*, 1890, xli, 323) says that there is, as far as he knows, only one case described—that of Busch—in which there had been an injury to the intestine from which the patient recovered, and which yet permitted satisfactory observation of the intestinal movements. This was a case of abdominal hernia with an artificial anus in the upper part of the small intestine. Through this abdominal opening the movements of the intestine under various conditions could be well seen.

The author has been fortunate enough to find an individual, a woman, suffering from constipation and movable liver, whose abdominal parietes were so remarkably relaxed and thin that the movements of the bowel could be observed with accuracy. Careful study of these, with the graphic plotting of curves representing them, seemed to render certain observations beyond doubt.

1. In the early morning hours the intestinal peristalsis as well as the gastric movements appeared to be at rest.

2. As soon as food is taken into the empty stomach and passes thence into the intestine an evident peristalsis begins, alternating with intervals of quiet. Sometimes the movements begin within a quarter of an hour.

3. No difference could be perceived in the intensity of action of different articles of diet upon the intestinal movements: except that coffee, whether taken fasting or after the mid-day

meal, almost always produces the strongest peristalsis.

4. The general irritability of the intestine appeared to have grown very slight by evening, since often no peristalsis was to be observed either immediately or a long time after the ingestion of the evening meal.

5. Except as mentioned, there appears to be no regularity in the intestinal peristalsis. The movements may be present before, during, or after a meal, may be marked or slight, may develop at once after eating or only after one to two hours.

6. The peristaltic motion never lasts long with the same intensity. Large waves alternate with small ones, or with intervals of rest.

These observations apply to the intestine under the influence of ordinary nourishment only. The author has examined also the effect of various agents upon the movements with the following results:

1. Slight degrees of cold, as the mere exposure of the abdomen, produce peristalsis after a few minutes, or strengthen it if already present.

2. Greater degrees of cold water, as sprinkling the abdomen with cold, likewise increase the peristalsis only in slight degree.

3. The drinking of cold water produces at once a lively peristalsis.

4. Rubbing of the abdominal walls has no effect.

5. Moderate pressure in the space between the two *recti abdominis* is followed by an unusually active movement.

6. Pressure and squeezing of the intestine itself produce no movement.

7. After coughing the peristalsis becomes evidently stronger during a considerable time.

8. Through pressing [evacuation of the bowels] an increased peristalsis is produced.

9. Respiration does not cause an active peristalsis to cease, but a prolonged holding of the breath does have this effect, though the movements return later.

10. Purgation, accomplished by means of enemata, develop very violent peristaltic movements, accompanied by rumbling and distention of the abdomen.

11. One to two drachms of castor oil taken internally have no effect upon the bowel during the first half hour, but then develop active peristalsis combined with rumbling in the abdomen.

12. Intense sensations of hunger always occasion active peristalsis.

13. The excitement of the emotions (as moderate fright, the sudden refusal to allow the patient to eat when hungry, etc.) causes the immediate disappearance of peristalsis, even when strong. After five to ten minutes the movements return.

14. The employment of electrical irritation produces very varying results. (a) The faradic current supplied to different parts brought out

or strengthened peristalsis in a few cases, but its action is very inconstant. (b) The galvanic current in like manner usually produced no or but slight peristalsis, and only in a few instances when applied through the rectum succeeded in developing active movements.—*Amer. Jour. Med. Science.*

### THE TREATMENT OF SUPPURATING CAVITIES WITH RIGID WALLS.

Kuester, Berlin (*Centralblatt f. Chirurgie*, 1890, No. 29), calls attention to the error committed by surgeons in the treatment of abscess cavities with rigid walls, in delaying opening the same, and in frequent irrigations of the same after opening. He insists upon the following:

1. The earliest possible incision.
2. The incision must be made at the most dependent point.
3. In case of large cavities, a counter-opening is to be avoided as far as possible. He dwells particularly upon the subject of empyema, and describes his method of dealing surgically with this condition as follows:

After exploratory puncture, an incision is made at the lowest point of the dull percussion note, usually in the fourth or fifth intercostal space, giving exit to the accumulated pus. A probe is then passed through the wound to the posterior boundaries of the cavity and pressed firmly between the ribs posteriorly until its point is felt in an intercostal space, at which point a portion of the superadjacent rib is resected. The opening thus made must be sufficiently large to enable the surgeon to obtain a view of the interior of the cavity. Should the lowermost portion of the cavity not have been reached by the first resection, a portion is removed from the subadjacent rib, until the junction of the diaphragm and inferior reflection of the pleura is reached. The cavity is then, under slight pressure, irrigated with a warm solution of salicylic acid, and the walls of the cavity carefully sponged of all traces of fibrinous matter, by means of a sponge in a handle, and through and through drainage established by drawing a tube from one opening to the other and securing it. The wounds upon the anterior and posterior chest wall are covered by iodoform gauze, upon which is laid a cushion of moss, which may remain undisturbed for upward of eight days. If, in case of a recent empyema, the lung begins to expand in the course of ten days, the through and through drain is substituted by a short tube through the posterior wound. The author anticipates that complete cure will follow this treatment, in recent cases, in from three to six weeks.

The author further treats of the treatment of cavities, which, unlike the pleural, are surrounded upon all sides by rigid and unyielding

walls; as, for instances, empyema of the antrum of Highmore. Of the three methods usually employed for gaining access to diseased conditions of the antrum, Kuester chooses that which perforates its wall from the face, for the reason that the indications considered by him most important of fulfillment can but be followed out by this route (through cleansing of the walls, and the identification by the figures of the different portions of the cavity). This is done subperiosteally, and the cavity is irrigated but once with an antiseptic fluid, and then tamponed with iodoform gauze. As soon as the suppuration becomes but slight (which sometimes occurs in a very short time), the iodoform gauze is removed and a small drainage-tube substituted therefor. In the empyema of the frontal sinuses, Kuester drains through the nose. Diseased conditions of the mastoid cells and of the cavity of the tympanum belong to this division of the subject; their treatment, however, is somewhat complicated as compared to the others, the preservation of his hearing, as well as the prevention of brain complications entering into the question. The same principles, namely, early and free opening, however should be followed.—*Fowler, Brooklyn Medical Journal. Amer. Pract. and News.*

### BLACK WASH IN RHUS POISONING.

I have had a very large experience with the dermatitis of rhus poisoning, and have never seen the application of "lotio nigra" fail in any stage of the disease. The part or parts may be freely bathed with black wash or wrapped in absorbent wool or cotton previously soaked in the solution. Immediate relief of subjective symptoms follows and the objective signs rapidly disappear. I have never seen untoward symptoms.—*Dr. J. A. Kite, in Med. News.*

### TEA A CAUSE OF COLD FEET.

Mr. Hutchinson says in the *Arch. of Surg.*, July, 1890, that he once advised a lady to drink more tea. "I cannot touch it," was her reply. "It makes my feet icy-cold, and wet with cold perspiration." On further inquiry, she assured Mr. Hutchinson that she was quite certain of her facts, and had often tested them. She thought that the perspiration was usually of the soles chiefly. Her hands were, she thought, also made cold, but not so definitely as her feet. Mr. Hutchinson says he had long been familiar with the fact that tea made the feet cold, but did not know that cold perspiration attended it. It does not do so in all persons. The coldness is caused, he believes, by contraction of the arteries, for the feet at the same time shrink. Alcohol has usually a precisely opposite effect.—*Med. and Surg. Rep.*

## ARISTOL IN THE TREATMENT OF SKIN DISEASES.

In a letter to the *Journal of Cutaneous and Genito-Urinary Diseases*, September, 1890, Dr. L. Brocq, of Paris, communicates some of his results with aristol in the treatment of cutaneous diseases. In his experience the drug acts only as a cicatrizant. In chaneroid its use does not seem to exert a favorable influence on the virulence of the disease. In tertiary syphilitic ulceration it apparently hastens cicatrization, provided that appropriate treatment with mercury and potassium iodide is also used. Cicatrization in tuberculous diseases of the skin is also hastened by applications of aristol. Applied to non-ulcerated lupus vulgaris or erythematous lupus, it exercises no useful influence. In tuberculous ulcerations of mucous membranes it is useful, and by means of it Dr. Brocq was able to secure cicatrization of an extensive tuberculous ulcer of the arch of the palate. In superficial epithelioma aristol does not seem to exert any destructive influence on the pathological cells; but, if the growth has been destroyed by caustics, by curetting, or by the hot iron, the drug hastens cicatrization. The author's method of treating this disease is to curette the base thoroughly, and if he believes that the diseased tissue is completely removed, to dress with aristol. If the disease is apparently not completely removed, he applies potassium chlorate, either in powder or solution, for a few days, and then uses aristol.

In the treatment of psoriasis, aristol has given the author scarcely appreciable results. To test its value thoroughly in this disease, he has treated all his cases with aristol on one side of the body, and with the ordinary applications on the other.

In no instance has Dr. Brocq seen aristol produce toxic symptoms.—*Med. News. Lancet-Clinic.*

## POINTS TO BE OBSERVED BY ELDERLY MALES.

1. To avoid being placed under circumstances when the bladder can not be emptied at will. Nothing is so bad for a large prostate, though it may be working satisfactorily, as an enforced retention. It is often the first cause of a permanent atony.

2. To avoid checking perspiration by exposure to cold, and thus throwing additional work on the kidneys. In climates like our own, elderly persons should, both in summer and winter, wear flannel next to the skin.

3. To be sparing of wines and of spirits (if used at all), exercising a marked diuretic effect either by their quantity or quality; select those which promote digestion without palpably affecting the urinary organs. A glass of hot gin and

water, or a potent dose of sweet spirits of nitre, will not do anything to remove the residual urine behind an enlarged prostate.

4. To be tolerably constant in the quantity of fluids daily consumed. As we grow older our urinary organs become less capable of adapting themselves to extreme variations in excretion. Therefore, it is desirable to keep to that average daily consumption of fluids which experience shows to be sufficient and necessary. How often has some festive occasion, where the average quantity of fluid daily consumed has been largely exceeded, led to the over-distention of a bladder long hovering between competency and incompetency. The retention thus occasioned by suspending the power of the bladder, has frequently been the first direct step towards establishing a permanent, if not a fatal, condition of atony or paralysis of this organ.

5. It is important that from time to time the reaction of the urine should be noted. When it becomes alkaline or offensive, the use of the catheter may be necessary. When a catheter is required it is most important that its selection should not be left entirely to the instrument maker. There are other points to be considered beyond the fact that it is to serve as an artificial outlet for the urine from the bladder. An unsuitable catheter in a prostatic case may do much permanent harm.

6. Some regularity as to the time of performing micturition should be inculcated. We recognize the importance of this in securing a regular and healthy action of the bowels, and though the conditions are not precisely analogous, yet a corresponding advantage will be derived from carrying out the same principle in regard to micturition.—*Medical Press and Circular.*

## QUADRANGULAR SOUNDS FOR THE TREATMENT OF ORGANIC AND SPASMODIC STRICTURES OF THE URETHRA.

The instruments which I show you are designed to stretch the urethra wherever its calibre is diminished, so that it is incapable of performing its functions normally. I have long felt the need of an instrument, which, when passed into a tight structure, would dilate it without impairing the healthy urethra adjacent to it. I have found, by repeated trials, that this instrument meets my expectations.

All surgeons who have given thoughtful attention to the treatment of diseases of the urethra, have observed the urethra crowding up in front of the usual round sounds, and stretching its long diameter to the limit of laceration, whenever an effort has been made to insinuate one of these round instruments through a tight stricture. No doubt many cases are seriously damaged by the longitudinal stretching with

the sound portion of the urethra receives under these circumstances. Notwithstanding the injunction, "Never use force in passing an instrument through the urethra," the organ is sometimes lacerated in the endeavor to get the sound to pass.

Then the longitudinal stretching does no good; and the round instrument which engages in a stricture develops so much friction by reason of the fact that every part of its circumference impinges on the point of greatest resistance in the stricture, that much force is lost, which, with a rectangular instrument of the same diameter, but presenting less friction surface, could be utilized in stretching the urethra laterally and so gliding through it.

I will not enumerate all the situations in which the round instrument is faulty and imperfect, nor will I say that these rectangular instruments can supersede the round ones entirely, but there are a few points of superiority which may be justly claimed for the rectangular instruments:

1. They present four points of contact with the stricture, therefore less friction than the round instrument.

2. They are grooved between the angles, and thereby insure the presence of the lubricating medium at the points where it will do most good.

3. They provide a mean for applying solvent medicaments to the stricture.

4. They stretch the urethra in its transverse diameter at the point where it is organically diseased or in a state of spasm.—[Wyman, *American Lancet*.

### THE STOMACH IN DIABETES.

The prominence of gastric symptoms in patients suffering from diabetes mellitus induced Prof. Rosentein (*Berlin. klin. Wochensh.*), to carry out observations into the relation of the gastric juice and stomach in ten cases. Of these, the contents of the stomach were normal in four, whilst there was some alteration in six. The results are summed up as follows: In a series of cases of diabetes free hydrochloric acid is absent from the gastric juice during a longer or shorter time, and this failure is to be looked upon as an expression of a neurosis of the stomach. In a number of cases there is extensive atrophy of the mucous membrane, in consequence of interstitial gastritis. Where the absence of free hydrochloric acid is permanent, atrophy of the glandular apparatus arising from interstitial inflammation is to be looked upon as the cause. The secretion-neurosis of the stomach, as well as failure of the knee-jerk and other neuroses met with in diabetes, do not stand in direct proportion to the gravity of the case in so far as it is measured by the amount of sugar, acetone, or diacetic acid.—*The Practitioner*.

### TREPHINING IN HEAD INJURIES.

Zeidler (*Amer. Journ. Med. Sciences*) says:

1. Symptoms of cerebral pressure following head injury, indicate trephining only when these symptoms point clearly to bleeding from the arteries of the dura.

2. Simple fractures of the skull, unaccompanied by symptoms of intracranial hæmorrhage, never indicate trephining.

3. Depression of the bone should not in itself be considered as an indication for trephining.

4. The object of primary trephining is asepsis, or the checking of hæmorrhage.

5. Secondary trephining is indicated in cases of beginning meningo-encephalitis.

6. Epileptoid attacks, due to the pressure of splinters of bone upon the brain, should be relieved by removing these splinters.

7. In treating fractures which involve a sinus, the bleeding from the latter should be checked by tamponade, and not by suture.

8. The term *débridement* should be applied to the operative procedures necessitated by a complicated fracture of the skull, trephining being reserved for the formal operation upon the uninjured bone.—*Lancet Clinic*.

### CHARCOAL WAFER BISCUITS.

These biscuits, as articles of food, are not, from the nature of the active ingredients which they contain, very attractive in appearance, but they possess a flavor by no means unpleasant. Indeed, it would be difficult to say from the taste alone that they contained charcoal at all. There is, too, no objectionable feeling of grittiness experienced during mastication. They are adapted for use in cases of excessive acidity of the stomach.—*London Lancet*.

### THE DIAGNOSIS OF CANCER.

Although the introduction of antiseptics and the progress made in our operative technique have greatly improved the prognosis of cancerous diseases, it must be confessed that our diagnostic means are still far from satisfactory. This is to be the more regretted, since an early diagnosis greatly enhances our chance of effecting a permanent cure in these cases. At the late Congress of the German Surgical Society, Professor Esmarch spoke of the uselessness of statistical studies in affording us information as to the etiology and diagnosis of cancerous diseases. He called attention to the fact that syphilitic tumors, especially of the tongue and throat, are not infrequently confounded with malignant growths, and proposed that the old term, "gumma," be abandoned, since these syphilomata—as he terms them—more often resemble in structure the fibromata and sarcomata. In fact, a large number of the sarcoma



group, especially those of the muscular tissue, are to be regarded as syphilomata, and may be cured by internal treatment alone, whilst some forms of malignant keloid and some of the malignant lymphomata, may also be placed in this class. During the past year, Prof. Esmarch classified all the cases of sarcoma of the muscles occurring at his clinic, and found that at least one-half of them were true syphilomata which promptly responded to specific treatment.

Tuberculous tumors — tuberculomata, the author calls them—not infrequently have given rise to errors of diagnosis, and it should be remembered that masses of pure tubercle may exist for long periods in the tongue, breast, and larynx without going on to ulceration. Of course, in the case of actino-mycosis mistakes are not uncommon, since the disease has been known only for the last ten years.

To avoid these errors of diagnosis, it is plainly our duty to make thorough microscopical examination of the growth before a radical operation is undertaken. For this purpose it may be sufficient to remove repeatedly superficial portions of the tumor, but if the results prove negative, it may be necessary to perform an exploratory operation of magnitude, even laparotomy, laryngotomy, trephining.

In doubtful cases where the microscopical examination shows only granulation tissue and spindle cells, Prof. Esmarch recommends an energetic and long continued anti-syphilitic treatment.

These views of the distinguished author merit serious attention. There can be no doubt that in the case of tumors a positive diagnosis is frequently not made until after their removal, and cases are probably not rare in which a microscopical examination of deeper sections of the growth than have heretofore seemed necessary might have prevented dangerous and disfiguring operations.—*Intern. Journ. of Surg. Cin. Lancet Clin.*

#### TREATMENT OF ECZEMA IN CHILDREN.

The treatment of eczema is not so definitely settled as to be one for all cases. Every case has its own peculiarities, and demands special attention. Remedies which may be found valuable in one may be found worthless in another. The treatment of the disease, when occurring during childhood, must be different from that employed in adults. Realizing this, Dr. E. Saalfeld, in the *Deutsche Medicinische Wochenschrift*, July 3, 1890, has endeavored to place the treatment of eczema in children upon a rational basis.

The disease in children owes its origin, in many cases, to excoriation or chafings, between the nates, in the bend of the knee, and in the folds of the neck. This is most frequently met with in fleshy children. In eczematous intertrigo,

when the usual household remedies such as salves and powders, have failed to give relief, a careful regulation of the diet and a change of food is primarily indicated. Very frequently diarrhoea will be an accompanying symptom, and this should be checked at once. If the skin is highly inflamed, a cool application of equal parts of a five-per-cent solution of boric acid and leadwater, and the use of a five-per-cent boric acid ointment will be found most beneficial. If the skin is moist, it should be dried with powder, before the ointment is applied. In cases of eczema of the head and face the diet should be very plain and contain as little fat as possible. The bowels should be kept open by means of suitable laxatives. The flakes and scales should be moistened with olive oil and removed. The underlying skin may then be treated with an ointment composed of boric acid, one and one-half parts; oxide of zinc and starch, of each five parts; vaseline thirty parts.

In general eczema, especially of a scrofulous origin, the constitutional treatment plays a most important part, and should include a careful regulation of the diet, the administration of cod-liver oil in connection with phosphorus and arsenic internally. The local treatment of these cases should consist merely in the application of vaseline and subsequent powdering.

Naturally, before any treatment for general eczema is instituted, a careful examination of the skin should be made, in order to exclude the possibility of the disease having been caused by the presence of parasites.

In conclusion, Saalfeld warns against the use of tar, since it is very irritating to the skin of children. Its place may, however, be ably filled by an ointment composed of white precipitate of mercury, one part; balsam of Peru, five parts; and benzoated oxide of zinc ointment, thirty parts.

Naturally, the hygienic surroundings of the patients is very important; well-ventilated rooms, fresh air and scrupulous cleanliness, all contribute largely to a rapid recovery.—*Medical and Surgical Reporter.*

#### BLOODLESS TONSILLOTOMY.

Prof. J. Toison, of Lille (*Rev. de Ther. Med. Chir.*, October 1), discusses the various methods of reducing or removing enlarged tonsils. He begins by saying that excision of the tonsils with the bistoury or the guillotine is gradually losing favor among surgeons on account of the risk of hemorrhage. Ignipuncture with the thermo-cautery or the galvano-cautery is often useful, but should be reserved for cases in which the tonsils are only moderately enlarged, and can be sufficiently reduced in one or two sittings, and for cases in which some anomaly of shape in the hypertrophied glands makes it difficult to remove them with a cutting instrument. For



ordinary cases, Prof. Toison uses a new snare of his own invention, which, according to him, effectually obviates all danger of bleeding. The apparatus consists of a *serre-nœud*, the metallic loop of which, instead of being free, is fixed by three silk threads to a blunt ring fixed to the distal end of the instrument. The ring is passed over the tonsil, which is then seized with forceps; the wire loop is next pulled home in the usual way, the traction being sufficient to snap the silk threads which fix it temporarily to the ring. The tonsil is thus cut through without bleeding. Prof. Toison has performed this operation several times since last April; in no case has there been any hemorrhage.—*British Medical Journal*.

### CHRONIC, SO-CALLED RHEUMATIC AFFECTIONS.

When the term of chronic rheumatism is used, it should be limited to those cases in which the joints are painful but not swollen, or in which there is a neuralgia or an arthralgia associated with myalgia or apart from it; or in which the fasciæ are affected, or in which there is a general neuralgic condition supervening on an acute attack of rheumatism. This is what we prefer to call "chronic rheumatism." But in speaking of the symptoms of rheumatoid arthritis, I will make reference to those symptoms which are sometimes put down as common to both. Let us imagine two patients sitting side by side, one with chronic rheumatism, and the other with rheumatoid arthritis. Now, what do we see? In the rheumatoid arthritis case the first thing that strikes us is most probably the pallor of the patient, as compared with the chronic rheumatic. We look a little closer, and the next thing we perceive will most probably be the joints. The patient with the chronic rheumatism will present in this feature little or nothing; whereas, on the other hand, the rheumatoid arthritis patient will be more or less crippled. There will be a distinct muscular atrophy in the rheumatoid arthritis case, and the complexion will present the pallor mentioned before, showing on closer inspection yellowish tinges on the face, neck, and perhaps elsewhere. If we ask both patients if they ever had rheumatic fever, they will probably say no; but further inquiry will elicit the probable fact that the family history of the patient with rheumatism will be a good one, or perhaps at the most a rheumatic one, while the rheumatoid arthritis patient, in most cases, gives or shows a strumous taint. It is upon the basis of this strumous taint that we feel we must look for further assistance to guide us in the treatment of this terrible crippling malady. It is nearly always present more or less. We are aware that this strumous history has not been particularly referred to in other descriptions of the disease. Its being the almost

invariable accompaniment has induced us to bring the matter forward. In fact, to look upon struma and rheumatoid arthritis as cause and effect has seemed to us the one plain characteristic in our investigations.—*Lancet, London Lancet. Pract. and News*.

### THE DRY TREATMENT OF CHANCROIDS.

It is generally conceded that if chancroidal ulcers can be kept perfectly dry, a great step has been taken toward their rapid healing. With this view, the following procedure has been used to some extent in the surgical divisions at Bellevue Hospital, New York: A small roll of absorbent cotton about one-half an inch in diameter and long enough to surround the penis just behind the corona, is put in that position after the prepuce has been well retracted. A rubber thread band is slipped over this ring of cotton in order to hold it in its place. By this means the sulcus behind the glans is obliterated, which is especially liable to retain the secretions, and the prepuce is held back from contact with the ulcerated surface. The cotton absorbs the exudation from those surfaces almost as soon as formed. The dressing is light, is easily handled, and may be renewed as often as needed to keep the parts in a dry condition. In addition to chancroids, herpes preputialis and venereal warts have been found to heal rapidly under the use of this dressing; sometimes no other treatment has been found necessary for these local lesions.—*Weekly Medical Review. Am. Pract.*

### THE REMOVAL OF FRECKLES.

The Pharmaceutical Record quotes the following prescriptions for removing freckles.

White precipitate,	} āā	5j;
Bismuth subnitrate,		
Glycerite of starch,		5 iv. M.

Apply every second day. Or,

Sulphocarbolate of zinc,	5 j;
Glycerin,	5 ij;
Alcohol,	5 j;
Orange-flower water,	5 jss;
Rose water sufficient to make,	5 viij. M.

Apply twice daily.

### WHOOPIING COUGH.

(Germain See, in *Jour. de Medicine*):

Powdered belladonna root,	gr. 1-5;
Dover's powder,	gr. ss;
Sublimed sulphur,	gr. iv;
White sugar,	gr. x.

M. Sig: Take in one dose from two to ten times a day, according to age of patient and effect produced.—*Am. Pract.*

In a severe case of acne associated with rosacea, Shoemaker advised and prescribed as follows (Times and Register): Wash the face in hot water, as hot as can be borne. Drink a cupful of hot water upon retiring and upon rising. Have the pustules punctured by a physician; the incision thus produced will not cicatrize, whereas, if they are squeezed, they heal with a scar. Take internally :

Liq. potassii arsenitis,	} āā	gtt. lxxij ;
Tr. nucis vomicæ,		
Aloini,		gtt. ij ;
Aq. menthæ pipe,		q.s. f̄ij iij ;

M. Sig : f̄ij ter in die.

Apply externally :

Acidi borici,	ʒj ;
Lanolini,	ʒij ;
Ol. eucalyptol,	gtt. v ;
Ung. zinci oxidi,	ʒj ;
Bismuthi subnit.,	ʒj.

M. Sig : Ft. unguentum.

For a case of herpes induced by a remote traumatism, Shoemaker prescribed, internally :

Ext. malt,	f̄ij ;
Elix. ferri lactatis,	ʒss.

M. Sig : This quantity thrice daily.

Externally, to allay the inflammatory action of the integument :

Cocainæ,	gr. ij ;	} āā	ʒss.
Sulphuris subl.,	gr. x ;		
Zinci carbonatis,	ʒj ;		
Marantæ,	ʒj ;		
Pulv. camphoræ,	gr. x ;		
Ung. aquæ rosæ,			
Ung. zinci ox. benz.			

M. Ft. ung.

—Pract. and News.

Castor Oil is a drug which has not yet been, and is not likely to be, altogether supplanted by its more modern rivals, says the British Medical Journal; nevertheless it has been found that patients often decline to take it, and choose some more palatable, but less efficient substitute. The best way of taking castor oil is thoroughly to mix the dose with about four times as much hot milk; that is most effectually accomplished by shaking the two together in a bottle which they do not more than half fill. When taken as above directed, the activity of the oil appears to be increased, and, being rendered very limpid by the hot milk, its oily nature is not perceived. Children take it very readily in this form, in which indeed it is scarcely distinguishable from rich milk.—Am. Pract. and News.

## THE CANADA MEDICAL RECORD,

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EDITORS :

A. LAPTHORN SMITH, B.A., M.D., M.R.C.S., Eng., F.O.S., London  
F. WAYLAND CAMPBELL, M.A., M.D., L.R.C.P., London.

ASSISTANT EDITOR

ROLLO CAMPBELL, C.M., M.D.

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MONTREAL, MARCH, 1891.

### SHOULD A POOR MAN STUDY MEDICINE ?

The above question is the subject of an editorial in a recent number of one of the leading New York journals, and one which is answered in the negative. He holds that not only is a thorough medical education becoming very expensive, but the young graduate has to contend with such keen competition, not only with long established practitioners and a host of other graduates, but what is much worse he has to compete with the hospitals and dispensaries at which the rich specialists not only see their patients for nothing but give them medicine besides. The lot of the young city doctor without private resources is indeed a hard one. But this editorial brought out several replies, showing that while these remarks were true in the large cities they did not apply to the country districts where there was still room for many hundreds of physicians who would receive a moderate fee for every consultation. One correspondent blames the hospital physician for not excluding from his clinic not only the well-to-do but also those who could afford a very small fee. But we think the hospital and dispensary physicians are not alone to blame for the difficulty the young physicians have in obtain-

ing a practice. When the young practitioner charges fees altogether beyond the means of the masses of workingmen to pay, and sends them to a drug store where fancy prices are charged, he must not complain if those who should be his patrons fall back upon charity for the services they cannot afford to buy. Very few patients indeed would endure the hardships they do endure in the outpatient department of a hospital or at a dispensary if they could afford to go to a doctor's office and afterwards purchase their medicine. We venture to say that notwithstanding the too abundant facilities for gratuitous treatment in the city and the consequent abuse of charity that follows, any hard working and well educated young physician can be earning his own living at the end of two years on condition, first, that the cost of his services and medicines be within the means of the masses to pay, and secondly that he conducts the financial part of his professional work on business principles, or in other words that he insists on being paid cash. The young practitioner who expects workingmen with large families living on a total income of twenty-four or thirty-six dollars a month to pay him the same fees as are received by his older professional brother, from the well-to-do and wealthy, is hardly entitled to much commiseration. There seems to be an idea in the minds of many young practitioners that it is *infra dig.* to charge less than a dollar a visit. With this we do not agree. While we think that twenty dollars a visit is the very least that should be charged a millionaire in receipt of fifty thousand dollars a year, to charge a dollar a visit to a laboring man with an income of two or three hundred dollars a year is cruel and extortionate. According to the writer in the *N. Y. Medical Record* above referred to, there is an immediate living waiting for every graduate who is willing to begin practice in the country, while those who elect to start in the city must be prepared with private means to support them during the years of waiting for their turn. As we

have already said, there is an almost immediate living for a great many more in the city if they are prepared to begin by serving the honest poor who are even more willing than the rich to pay in proportion to their means.

#### A UNIVERSITY OF CANADA.

During our last visit to England a patriotic Canadian who has risen high in the London medical profession urged upon us the propriety of advocating a single portal to practice in Canada to be called the University of Canada. Great difficulties stand in the way of the realization of this idea, but they are not insurmountable, while on the other hand the advantages would be very great. Our London friend knows that all the medical colleges in Canada, so far, give a thorough medical training, but having in view the state of medical education in the United States where we see at the same time the very best and the very worst medical schools in the world conferring the same diplomas and rights to practice, so that American diplomas are scarcely recognized abroad, he believed that we might by having a single standard avoid the possibility of ever having their reputation lowered by competition. Let us see what difficulties would stand in the way. The principal one would be the vested rights cry of the universities which would have to make the sacrifice of the fees for the degrees. All the medical schools could go on with their work just as they are doing at present, and when at the end of the four years course they felt satisfied that their students had a reasonable chance of passing they would certify them and send them up to the University of Canada for their degree. The University would consist of examiners only, not teachers, who would be elected by the professors of all recognized schools, and who would meet in Montreal during the first week in May of every year. The second objection would come from the candidates who might be in-

clined to place personal convenience before patriotism and the general welfare, and who would be obliged to travel from all the outlying teaching centres to the metropolis for examination. But this would only be once in a lifetime, as the matriculation could be managed by sealed papers entrusted to a local examiner in each city. Some of the candidates who would like to get through easy would of course object, but the profession is already so crowded that it could well afford to keep half educated men out of its ranks. There would thus follow a general raising of the tone of the profession. The University might then undertake the protection of its graduates, which is now very inefficiently performed by the provincial medical boards. There would be also to some extent a saving of expenditure or a concentration of energy, for instead of having eight examining boards, the members of which are necessarily of very ordinary capacity for such work, we would have one examining board composed of the very ablest men in each department. The different local universities might make up for the loss of revenue by raising the cost of teaching, as many are of the opinion that the fees are much too low. We would commend this idea of a University of Canada to our contemporaries so as to elicit an expression of opinion from the profession of the Dominion.

#### ALCOHOLISM IN THE PROFESSION

Under the above heading we notice an editorial in the *Medical News and Circular* of London, 11th Feb., 1891, in which its writer says: "From time to time circumstances remind us that the vice of inebriety is not confined to the non-professional classes, and sad instances of its ravages occur even among those who have attained to the more serene altitudes of the profession after the usual period of anxious expectation and waiting. It would seem that this period of restless inactivity conduces to indulgence in stimulants if only to drown

care and to enable the unoccupied energies to await the advent of better times." He also notes that general practitioners resort to alcohol as a relief to the worry and strain of practice, and that those who thus use it themselves are too apt to prescribe it unnecessarily for others. Happily the temperance movement which has done so much for the drink-oppressed people of England has made its influence felt in therapeutics, so that the profession fully realize the danger of resorting to stimulants without some very grave reason. We remember that during our two winters spent at Guys and the London hospital we were very much struck by the large number of students who made use of alcohol while the medical journals frequently contained notices of malpractice suits against physicians who, while under the influence of liquor made such little mistakes as cutting off a loop of small intestine instead of the umbilical cord. At that time one of the leading general practitioners of the west end of London informed us that his becoming a total abstainer and ceasing to prescribe port wine unnecessarily, had cost him half his income. Since then, however, things are very different. In this country we are glad to say there is comparatively little drinking either among students or practitioners, one of our medical schools being so anxious for the morals of the young men coming to the city to study, that it provides a large building or *pensionnat* in which the students are boarded at less than cost price, each one having two rooms with board for the modest sum of twelve dollars per month. The doors of the building are locked from 8 p.m. to 8 a.m., large recreation rooms with music and other amusements being provided in the house. This plan has been in operation for twenty-five years with the result that the students are provided with wholesome food, healthy lodgings, proper time for study, and a sufficient amount of sleep, lights being put out at 10.30; while on the other hand they are saved from the temptations of city life,

such as taverns and houses of illfame; and from entangling relations with the boarding house keeper's daughter so often ending in life-long trouble. We can safely say that what little drinking there is among the profession in Canada is the result principally of habits acquired during student life, which should therefore be guarded by the watchful and loving eye of the Alma Mater.

### BOOK NOTICES.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS, consisting of Original Treatises and Reproductions, in English, of Books and Monographs selected from the latest literature of foreign countries, with all illustrations, etc. Contents: Practical Guide to the Demonstration of Bacteria in Animal Tissues, by Dr. H. Kühne, Wiesbaden; On the present position of Antiseptic Surgery, by Sir Joseph Lister, F.R.S.; Cancer and its Complications, by Charles Egerton Jennings; The Treatment of Epilepsy, by Dr. Ch. Fréré; Handbook to Dr. Koch's Treatment in Tubercular Disease, by Drs. Grün and Severn. Published monthly. Price, \$10 a year; single copies, \$1. December, 1890. New York: William Wood & Co., 56 and 58 Lafayette Place, 1890.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS, consisting of Original Treatises and Reproductions, in English, of Books and Monographs selected from the latest literature of foreign countries, with all illustrations, etc. Contents: Advances in Bacteriology, by R. Koch, M.D.; Formulary of New Remedies and New Medicinal Preparations, by H. Bocquillon-Limousin; Anesthetics: a Discussion, by Dr. William Macewen and others. Published monthly. Price, \$10 a year; single copies, \$1. January, 1891. New York: William Wood & Co., 1891.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS, consisting of Original Treatises and Reproductions, in English, of Books and Monographs selected from the latest literature of foreign countries, with all illustrations, etc. Contents: The Clinical Use of Prisms, and the Decentring of Lenses, by Ernest E. Maddox, M.B.; Electricity in the Treatment of Uterine Tumors, by Thomas Keith, M.D., LL. D., Edin., and Skeene Keith, F.R.C.S., Edin.; Ether Drinking: its Prevalence and Results, by Ernest Hart. Published monthly. Price, \$10 a year; single copies, \$1. February, 1891. New York: William Wood & Co., 1891.

ILLINOIS STATE BOARD OF HEALTH.—Seventh Report on Medical Education, Medical Colleges and the Regulation of the Practice of Medicine in the United States and Canada, 1765-1891. Medical Education and the Regulation of the Practice in Foreign Countries. By John H. Rauch, M.D., Secretary, 1891.

For the first time in its history the Report on

Medical Education, issued by the Illinois State Board of Health, embraces the medical institutions of the whole world. This is a feature that will be an assistance to medical boards that have to determine the value and validity of a medical diploma.

As regards medical education in the United States, the Report shows the marked changes for the better that have taken place in the past ten years, and it is seen that more progress will be made within the next two years. Most of the changes for the better that have been made in this century have occurred since 1881, when the first number of this Report was published, and since 1882-83, when the schedule of minimum requirements of the Illinois State Board of Health went into effect. In 1882 only 45 Colleges in the United States and Canada required educational qualifications for matriculation; now the number is 129. Of the 148 medical colleges 123 now teach hygiene and 119 teach medical jurisprudence. In 1882 these branches were taught in 52 and 61 colleges, respectively. In 1862-83 the average length of the lecture terms was 23.5 weeks; the average is now 26.3 weeks. There are now 111 colleges that have lecture terms of 6 months or more, while in 1882-83 the number was 42. A table shows the results of the examinations before the State Boards of Medical Examiners of Alabama, Minnesota, New Jersey, North Carolina, South Carolina and Virginia since the dates of their organization. Another table shows the results of the Prussian State Examinations in 1890.

Special attention is called to the fact that in some of the largest universities in this country courses preliminary to the study of medicine are now offered—the University of Pennsylvania, Cornell, Yale, Princeton, Lake Forest and Northwestern Universities, Johns Hopkins and the University of Wisconsin, while Harvard has made arrangements by which those intending to study medicine can take a special A. B. course in three years. The course offered by the University of Wisconsin is fully outlined, as is the one that was proposed by the Medical Department of the University of Michigan, but was rejected by the joint faculties. The Report shows a marked increase in requirements as to preliminary education during the year 1890. It shows also that the movement for four years' study and three courses of lectures is an assured success, and a list is given of the colleges that have adopted or will soon adopt the requirements of longer terms of study.

Several State boards, having authority similar to the Illinois Board, have already adopted the requirement in this respect, and those that have not already done so, will in a short time co-operate in the movement. The potency of this factor will be appreciated when it is considered that these boards directly control the recognition of diplomas embracing about 41,000 000 people, and indirectly in almost the entire area of the United States; and that a number of them exercise jurisdiction in the new States and Territories.

It is suggested in the Report that, with four years' study and three courses of lectures assured, the boards of medical examiners and the colleges should co-operate in establishing a system of registration of medical students before they enter college, in order that the requirement of one year of study outside a college may not be mere form.

A correct resume of the medical practice acts in the different States and Territories is a valuable addition to the Report. Comprehensive tables show the progress made towards higher medical education in the past ten years, with the numbers

of matriculates and graduates for each year, and the percentage of graduates to matriculates. These tables show the effect of the schedule of minimum requirements of the Illinois Board after the session of 1882-83. In 1882-83 the total number of medical students in the United States was 12,274, while in 1884-85 it was 10,987; and the 12,000 mark was not reached again until 1887-88. The percentage of graduates to matriculates in the United States has fallen from 35.8 in 1881-82 to 21 in 1890. The percentage in Canada has not reached 24 in ten years.

That portion of the Report devoted to institutions and regulations in foreign countries contains in full the requirements of the examining boards in Great Britain, with the names of all the medical schools and of all the hospitals in which instruction is given. The requirements as to preliminary education in foreign countries are given for purposes of comparison, as well as the requirements for graduation and for the license to practice. The course of study and the semesters in which the various subjects should be taken up, as advised in the German universities, as well as a description of the German method of examining for the license to practice, are given in full. In addition, the correct names and locations of foreign medical institutions are given.

**THE JOHNS HOPKINS HOSPITAL REPORTS.**—Report in Gynecology, I. By Howard A. Kelly, M.D. Contents: I. The Gynecological Operating Room and the Antiseptic and Aseptic Rules in Force; II. The Laparotomies Performed from October 16, 1889, to March 3, 1890; III. The Report of the Autopsies in Two Cases Dying in the Gynecological Wards without Operation; IV. Composite Temperature and Pulse Charts of Forty Cases of Abdominal Section; V. The Management of the Drainage Tube in Abdominal Surgery; The Gonococcus in Pyosalpinx; VII. Tuberculosis of the Fallopian Tubes and Peritoneum—Ovarian Tumor; VIII. General Gynecological Operations from October 15, 1889, to March 4, 1890; IX. Report of the Urinary Examination of Ninety-one Gynecological Cases; X. Ligature of the Trunks of the Uterine and Ovarian Arteries as a Means of Checking Hemorrhage from the Uterus, etc.; XI. Carcinoma of the Cervix Uteri in the Negress; XII. Elephantiasis of the Clitoris; XIII. Myxo-Sarcoma of the Clitoris; XIV. Kolpo-Ureterotomy—Incision of the Ureter through the Vagina, for the Treatment of Ureteral Stricture; XV. Record of Deaths following Gynecological Operations. Baltimore: The Johns Hopkins Press, 1890.

This small work of 250 pages marks a new era in the literature of hospital reports. As will be seen by the perusal of the table of contents, an immense amount of interesting and valuable material is introduced under one heading or another. One of the most interesting chapters is the illustrated description of the operating room, which is acknowledged by all who have seen it to be as nearly perfect as ingenuity and money can make it. One can see in reading this chapter that Dr. Howard Kelly of Baltimore is thoroughly imbued with the spirit of Dr. August Martin of Berlin, under whom he has recently studied. As he says, the working rules are antiseptics up to the beginning of the operation, asepsis throughout the operation and preservation of the aseptic state after the operation. After describing the building and the room, he mentions one thousand and one details which are

essential towards attaining these ends, details, we may add, which owing to their cost have hitherto rarely if ever been attainable in any one institution. More dependence is placed upon sterilization by heat than upon disinfection by chemicals, in the preparation of the patients, instruments and dressings, while soap and water and the nail brush used during ten minutes at least are depended upon to a great extent in the preparation of the operators and the patients. The abdominal sections are beautifully tabulated, so that one can see at a glance the age of the patients, the nature of the disease, the kind of operation, including the difficulties encountered, whether a drainage tube was used, how long, time consumed by the operations, the temperature if over 100, whether there were any stitch hole abscesses, and whether the patients recovered or died. Following the tabulated list is an analysis of cases in which the peculiarities of each case are briefly but thoroughly gone into, and the practical deductions are given. The careful perusal of this chapter by every abdominal surgeon cannot fail to be of the greatest possible value. The chapter on the temperature charts and management of the drainage tubes are also intensely interesting. In the former we see that the temperature after the simplest and most uncomplicated cases is always higher than in health, while after the removal of pus tubes it may remain as high as 101° to 102° without causing anxiety. The rest of the report is equally interesting, and we trust that Dr. Howard Kelly will continue from time to time to disseminate the valuable experience he acquires, and thus save other operators from purchasing their experience at the price of human life.

**PRINCIPLES OF SURGERY.** By N. Senn, M.D., Ph.D., Milwaukee, Wis., Professor of Principles of Surgery and Surgical pathology in the Rush Medical College, Chicago, Ill., etc. Illustrated with 109 wood-engravings. Philadelphia and London: Z. A. Davis, Publisher, 1890. Price \$4.50 in cloth; sheep, \$5.50.

After perusing this work on several different occasions we have come to the conclusion that it is a remarkable work by a man of unusual ability. We have never seen anything like it before. As the author says, the recent great discoveries relating to the etiology and pathology of surgical diseases have made the text books of only a few years ago old and almost worthless. The author has devoted a large part of his work to the study of bacteria, giving them their true place in the causation of surgical diseases. The work treats exhaustively of the pathology, etiology, and treatment of the surgical germ diseases, but does not touch upon fractures, dislocation, etc. In other words it is a work on the principles but not on the practice of surgery. It embraces inflammation, necrosis, suppuration, septicemia, pyemia, erysipelas, tetanus, hydrophobia, surgical tuberculosis, actinomycosis, anthrax, and glanders. Many of the references and illustrations are taken from German authors which are not readily accessible to English speaking students. These subjects are handled by the author as we have never seen them treated before, so that this work is more suitable for the professor than the student. The author seems to have had a very large personal experience, which is freely made use of in the text, besides which he is familiar with almost all that has been written in English and German on the above topics. We con-

gratulate Dr. Senn upon the manner in which he has accomplished his task.

**A MANUAL OF MODERN SURGERY.** For the Use of Students and Practitioners. By John B. Roberts, A. M., M. D. Philadelphia: Lea Bros. & Co.

This handsome volume on practical surgery fully supplies the want which the author had in view when he wrote it, namely, to be a book of ready reference for the young surgeon, as well as a text book for final year students in this branch. The reading material is so put together as to make its perusal pleasant, and the various subjects are briefly and concisely gone into, yet by this brevity it in no way loses any of the explicitness of more ponderous works. In its pages many of the more minor details of the various operations are fully described with great clearness. The illustrations are of the very best, and they are selected in a manner that indicates the author is fully abreast of the times, and possessed of the keenest judgment. It is a book that one delights to read, study and consult. The letter-press and paper are excellent and the general appearance of the volume would make it a handsome addition to any practitioner's library.

**A TEXT BOOK OF PRACTICAL THERAPEUTICS**, with especial reference to the application of remedial measures to disease, and their employment upon a rational basis. By Hobart Amory Hare, M. D., (Univ. of Pa.) B. Sc., Clinical Professor of the Diseases of Children, and Demonstrator of Therapeutics in the University of Pennsylvania, Secretary of the Convention for the revision of the U.S. Pharmacopeia of 1890, etc., etc. Philadelphia: Lea Brothers & Co., 1890. Svo., cloth, pp. 632.

We have purposely withheld our comments on this work, till the present in order to permit of a thorough perusal of its contents. Having now done so we can fully assure our readers that the task (if we may express it) has been a most pleasant one. The author's ideas in the general construction of the material are thoroughly original, and the work is designed for the use of the student as well as the medical practitioner, and a successful endeavor has been made to combine science with practice by placing this most difficult subject on a rational rather than an empirical basis. It is essentially a work on practical therapeutics. The arrangement of the drugs is alphabetical and the volume is quite abreast of the times and the newer drugs, *e.g.*, acetanilide, are spoken of at some length. A point which is of much importance to Canadian readers is the embodiment of the *matéria medica* of the *British Pharmacopœia*. The first part of the work treats of the remedies employed in modern practice and the latter part is devoted to a description of the treatment of the various diseases. In the appendix is found a full table of doses; also a complete index of remedies and diseases, making the work as a whole a very acceptable text book for the student, as well as a volume for reference or the busy practitioner.

## SOUTHERN ENTERPRISE.

It appears, from a pamphlet we have received, that Pine Bluff, Moore County, North Carolina, is an El. Dorado for patients suffering from lung diseases. In order that the merits of the place may be investigated, the management of the location have made the very generous offer to the Editor of this journal to provide a free pass from New York there and back, between the 8th and 15th of April; or, if the Editor is unable to go, the offer holds good for some other member of our staff. As we are rather short handed at present, we are unable to accept the invitation, but we are prepared to engage a reporter for the special work, without salary, to whom we will give the free ticket offered us, and who would no doubt come in for a good time among the hospitable denizens of Southern Pines, the new health resort. Any of our readers desiring to take this journey should apply at once to the Managing Editor of the Record.

## NEWS ITEMS.

The *University Medical Magazine*, of Philadelphia. We have much pleasure in calling the attention of our readers to a new departure which this excellent journal is making. The method adopted is as follows: a corps of young medical men make extracts from all the leading foreign journals; these extracts are then submitted to the chief of each department who selects the most important ones, which present in the most satisfactory manner the current literature of the day. When we state that these departments will be under the personal direction of such men as Pepper, Agnew, White, Wood, Goodell and Hirst, we need hardly state that the result of their labors will give the greatest satisfaction. We trust that the enterprise of the publishers will be rewarded by a largely increased subscription list, the price remaining as before, only \$2.00 per annum. The journal has long been one of the most welcome among our list of exchanges.

**Men who Advertise** and need a new idea now and then, or who have not always the time or inclination to prepare their advertisements, will find a valuable assistant in the novel book of "Ideas for Advertisers" just published by T. D. Mallett, New Haven, Conn., and sent on receipt of \$1.00, post-paid. He also publishes a tasty pamphlet called "When," (price 25c.) a treasury of good advice to business men. Descriptive circulars of both these new books can be obtained upon request to the publisher.



Reprint from the Kansas City Medical Record.

## THE ACTIVE PRINCIPLES OF PARSLEY IN AMENORRHEA AND DYS- MENORRHEA.

Various methods for the extraction of the active principle of parsley have been proposed from time to time, but there has been always a want of uniformity in the therapeutic results obtained with the so-called Apiol preparations, hitherto found in commerce.

With a view to obtain a reliable product, M. Chapoteaut recommenced a study of the plant and finally adopted a new process for the extraction of a thick, reddish liquid boiling at 275° C. (527° F.) specific gravity 1.113.

*This is a product totally different from true Apiol (Von Gerichten), since the latter is a solid melting at 30° and boiling at 300° C., and different from the Essence or Oil of Parsley, boiling at 160° C., while its reddish color indicates that it cannot be confounded with ordinary so-called commercial Apiol, which is a yellow or green liquid having an approximate specific gravity of 1.07.*

This new substance therefore has been named *Apioline (Apiolinum)* by M. Chapoteaut, and clinical experiments show it to be the true active principal of the plant.

Dr. Laborde\* has made an exhaustive study of the action of apioline and its derivatives, cariol, etc., on animals, which indicates that it stimulates the circulatory system of the intestines and genitals, causing vascular congestion of the uterus and ovaries and exciting contraction of the smooth muscular fibres of the genital organs, especially of the uterus and ovaries.

Experiments made on female guinea pigs and dogs demonstrated this special action in a very decided manner and corresponding genital excitement was also observed in males.

These results have been remarkably confirmed by their therapeutic application in the French hospitals.

*Apioline Chapoteaut* administered in spherical capsules 20 centigrammes each, always relieved the pain in spasmodic and congestive dysmenorrhea, cases in which principal reliance should be placed on equalizing the circulation and increasing the power of the ovarian misus.

In amenorrhea, where the menses had been suppressed even for a considerable length of time, the flow promptly reappeared.

In fact, all cases depending on uterine troubles amenable to internal treatment, and where a correct diagnostic of the symptoms had been made and suitable hygiene and treatment observed, this drug relieved the suppression, regu-

lated and prevented or removed the accompanying pain, and proved to be the most powerful emmenagogue with which we are familiar.

In cases of scanty or deficient menstruation with pain, etc., one capsule can be given after meals, thrice daily for a week before the expected period, as recommended by Dr. Fordyce Barker.†

R Apiolini grm. IV. (about 5i)  
ft. Capsule No. xx (Chapoteaut).

Sig.: Take three each day during the week preceding menstruation.

It is especially appropriate when amenorrhea depends upon anemia. The same authority suggests the administration of aloine or podophyllo-toxin when amenorrhea and dysmenorrhea are complicated with constipation. Although apioline is looked on as a specific for menstrual disorders by many gynecologists, it must not be forgotten that these troubles are often subordinate or associated with a general atony of the system, which requires tonics, hematics (*Ferrum Sanguinis*) and suitable hygienic agents. Finally *Apioline Chapoteaut* cannot be expected to remove dysmenorrhea depending on mechanical obstruction of the cervical canal—causes of failure which are sometimes overlooked.

Dr. Vadeboncoeur, after a series of trials with *Apioline*, writes: "I have obtained excellent results in painful cases of dysmenorrhea. One lady patient who was an hysterical subject, and who was obliged to use injections of morphine to relieve the pain, has found this unnecessary since I prescribed *Apioline*."

Dr. C. Hewson Bradford, of Philadelphia, November 21, 1890, reports: "I have used it successfully in amenorrhea. Miss H., æt. 19 years, had always been irregular; her menses were always scanty and for the last two months they had been absent.

She expected her menses on November 17th, so on the 12th inst. I gave her the *Apioline* Capsules and requested her to take one morning and evening until after her sickness had appeared—to-day I visited her and found her much improved. She stated that menstruation had begun early on the morning of the 18th inst.

\* J. Laborde, directeur des Travaux Physiologiques à la Faculté de Médecine de Paris.—*Tribune Médicale*, January 8, 1891.

† See Shoemaker's *Materia Medica and Therapeutics*, Vol. II. page 447.

## PERSONAL.

Dr. Charles E. K. Vidal (Bishop's '90) who for nearly a year past has been one of the resident house surgeons of the Montreal General Hospital, has resigned this appointment to accept the position of assistant to Dr. P. E. Menburn, residing at Lethbridge, Alberta, N. W. T. We wish him all possible success in his new undertaking.



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## Original Communications.

### PROF. KOCH'S METHOD OF TREATING TUBERCULOSIS AS OBSERVED IN BERLIN AND LONDON.\*

By Dr. J. B. McCONNELL, Professor of Pathology, University of Bishop's College, Montreal.

I arrived in Berlin on December 20th, 1890, the beginning of the holiday season, and at a time when the excitement in regard to the new treatment for tuberculosis had somewhat subsided, and most of the foreign physicians had left. But few students were in attendance at the hospitals, and the quiet which thus prevailed was an advantage to one wishing only to observe the effects of the treatment by Prof. Koch's lymph, and the best time to gain information in regard to the cases was found to be during the rounds of the assistant physician in the early morning as he enquired into and recorded the progress of the treatment. My observations were made chiefly at the clinics of Drs. Cornet, Krause and Bergmann at the Charité and Moabit Hospitals and at the City of London Hospital for diseases of the chest, Victoria Park, and one cannot express too much gratitude for the pains taken at one and all

of these institutions to give visiting investigators the fullest information.

Most of the cases had then been under treatment from three to six weeks, and some of the temperature charts conspicuous at the head of each bed at the Charité had by being attached to one another grown to be a couple of yards and over in length, and so arranged that the progress of the temperature, pulse and respiration tracings—in different colors running along together—could be seen at a glance. I was a little surprised to note at some of the clinics in Berlin how completely the minute directions given by Prof. Koch for the use of the lymph were ignored. I saw the lymph dropped immediately into the diluting solution without any other measurement, and the same syringe used with one patient after another without re-cleansing or the application of any antiseptic to the seat of inoculation, all apparently without any penalty resulting from the nonconformity to specified rules.

One can but inadequately convey in a single paper the great amount of information which one can note down in the course of 15 days' study among several hundred cases. The details of typical results of the application of the lymph must now be so familiar to all that I will confine myself to a few notes of special features and some general

\*Read before the Medico-Chirurgical Society, Montreal.

observations, and particularly in regard to tuberculosis of the respiratory organs. As the effect of the remedy is to produce a necrotic action on the living tuberculous tissue, which has to be thrown off by the system, the best results are to be seen in the tuberculous affections of the outer surfaces, or where the focus of disease has free drainage.

The marvellous results in lupus are the most striking features of the lymph treatment. At Bergmann's clinic cases were to be seen in all stages of treatment, from the first intense local reaction to the freshly formed cicatricial tissue. Two cases of lupus of the face where reaction had ceased with full doses (.1c.c.) were considered cures. One of those, which had healed after 10 injections and had resisted a week previous to my visit, December 24th, had been again injected the day before and presented several nodules of local reaction, showing apparently that the affection had relapsed. One case, after 15 injections, and another after 14, the last being .06 c.c., were also apparently about well. Dr. DeRuyter stated that 4 or 5 cases of joint tuberculosis had showed rapid improvement under the treatment, but I did not make any special enquiry into these cases. In one case of enlarged glands at angle of jaw, sub-acute inflammation had occurred, followed by a decrease in size, but they did not regard it as proof of a cure. As complications they had observed exfoliations of the epidermis, exanthematous and pustular eruptions, even after small doses, and children had diarrhoea and bloody stools.

At Cornet's and Krause's clinic on Zieglerstrasse demonstrations were given by Dr. Friedlander. Three cases lupus, 4 joint affections and some 20 cases phthisis were being treated. One case of lupus, affecting half of cheek, lip and nose, was considered cured, and was having evaporating lead lotions applied to the face to remove the redness still remaining. She had had 17 injections, the first of .01 c.c., on November 13th, and last,

.3c.c. on December 25. No reaction occurred after 13th injection, December 10th, when .1 c.c. was given. On the 25th the dose had been increased to .3c.c. and he intended continuing at intervals of 3 or 4 days, increasing dose by .1c.c. until .6c.c. was reached. The general reaction was usually very pronounced in lupus. He began with .001c.c. and often had very strong reaction with .005c.c. The injections were given every 3rd or 4th day. No antipyretics or medicinal treatment employed. In another case treated first on the 18th December, the reaction and swelling of the face had been intense from .005c. c., given on 23rd; at this date (29th) crusts had formed and been thrown off and a second series covered the affected spots on the face. She suffered from great weakness, severe pains in limbs and back and was considered too ill to be reinjected. Although at the end of the treatment in these cases there is but little elevation of temperature, he advised against suddenly stopping the injections. One patient who had left the hospital for a week came back much reduced. He compared the action of the lymph in this respect to that of morphine or arsenic. From his remarks on this occasion I gathered the following points:—Localized tuberculosis in joints required much larger doses. He begins with .1c.c. Case No. 4 gave no reaction with a first dose of .05c.c.; required .1c.c.; injections were given over hip or deltoid. Reaction usually occurs five to six hours after; in phthisis they found that the reaction was later, may be within 12 but sometimes as late as 24 hours. It was necessary to find this out in each case, so that reaction can be secured during the day. Their experience had been that hæmoptisis was produced in many of the cases; in one where it had occurred three years previously this result followed. Of frequent occurrence also were pleuritic pains in the side affected. He advised always beginning with .001c.c. and not repeat for two days even if no reaction occurred, and then give the same dose. It is a fact somewhat generally experienced that reaction often does not

occur until after the second or third injection with the same quantity of the remedy. Patients were subjected to close observation for several days before injection. In some cases the fever which was present on admission subsided after a few days rest, in others it continued, when the treatment must be applied with great caution. When a dose of 1c.c. was reached and failed after a few times to increase reaction the treatment ceased. In some cases where this point had been reached and bacilli could not be found in the sputum they have reappeared in a week or two after, and then a dose of 15c.c. was followed by reaction. He observed that the bacilli did not stain so readily after the treatment as before.

On December 29th an interesting case of laryngeal tuberculosis was shown. The patient had been under Krause's care for several months. The tumescence in the left vocal cord was diagnosed by Virchow as being tuberculous. A cure apparently resulted with the lactic acid treatment. Five months ago he reappeared with ulceration at the same site, which again healed with lactic acid applications. Milligramme doses of lymph caused no reaction. The treatment was stopped for two weeks, when 01c. c. (on the 28th) produced reaction, thus confirming the previous diagnosis. One case of phthisis only was regarded as having been successful. Infiltrations existed in one apex only. The bacilli had disappeared after five weeks treatment, and the abnormal physical signs were gradually disappearing. The larger number of cases showed but little gain, but the treatment would be persevered with.

(December 28th). In the Charité the number of cases of every form of tuberculosis was somewhat bewildering to one having limited time at his disposal, and only points of special merit could be noted. I studied the cases chiefly in Prof. Leyden's wards, and am much indebted to Dr. Klemperer, his first assistant, who spoke good English, for the great interest he took in giving me the most important features of

each case. Microscopes, &c., were kept at hand on side tables. The method employed is known as *Gabbet's*.

Fuchsin,	1 gm.	} Stain in this (heated) two minutes.
Alcohol,	10 "	
Acid Carbolic,	5 "	
Aq. distillat,	100	

Methylene blue, 2 gm.

Acid sulphuric, 25 "

Aq. distillat, 100

(filter) Four minutes in this solution.

Tall glass jars graduated were used to collect sputa, which was when about to be examined spread out on a soup plate, the bottom of which was blackened.

(December 28th.) A case of pharyngeal and laryngeal tuberculosis, which was first treated on the 10th November—no fever on entering—had not made much progress. She had had twenty injections during the seven weeks, 1st '002, this day '09, reaction had occurred each time and does so still. Suppuration had occurred in one tonsil, the whole pharynx presented a red, swollen, spongy appearance, was expectorating over a pint a day of reddish muco purulent flaky secretion. She was steadily losing in weight.

In another case of laryngeal tuberculosis in a healthy female, where two months' ordinary treatment had failed to effect a cure, the ulcer on the inter-arytenoid fold had completely healed after 11 injections, last one '08 cc. During the treatment pharyngeal tuberculosis was brought to light evidenced by the severe inflammation which resulted, a clear line of demarcation could be seen between the healthy and affected tissues. As the reaction is not great, she was to get 1c.c. the next day, and when this dose failed to react she would be considered cured. In neither case did any stenosis result.

A case of chronic phthisis in both apices, four years duration, had been treated four weeks; first injection '002c.c. caused no reaction; same dose next day caused reaction; three days after '003 caused no reaction; in two days same dose reacted. No reac-

tion of late with .01c.c. doses. Increasing in weight. A cure was expected in this case.

A case of pharyngeal abscess, followed by disease of the atlas, reacted: had been four weeks under treatment without any improvement, but they would continue the injections for months.

A case of cervical spondylitis with hemiplyia had reacted to eight doses during four weeks.

An anæmic woman, whose parents had both died of phthisis, was injected, reaction occurred, and a patch of inflammation appeared on left cheek, having the appearance of a reacting lupus patch. The face had apparently been healthy previous to the injection. A similar case had been observed among Dr. Heron's cases in the Victoria Park Hospital, London, and Dr. Malcolm Morris mentioned to me a similar occurrence in one of his cases.

Two cases of what were classified as bronchitis, gave reaction, but no bacilli were found.

One case of leucocytosis and one of chlorosis, gave reaction and no other signs of tuberculosis.

A case of leucorrhœa having been injected, reaction followed, and after third injection cough was developed and bacilli were found in the sputum.

Frau Scholles on entering had no cough, the small amount of sputum that could be hawked up was devoid of bacilli. After the third injection the sputum increased and bacilli were found.

Rimkus, aged 31, whose mother died of consumption, had deposits in both apices. Bacilli in sputum, is a good example of delayed and prolonged reaction. .002c.c. given on December 22nd, produced reaction in 38 hours; 25th, .004c.c., reaction 36 hours after; 28th, .005c.c., reaction 15 hours after and lasted 18 hours, highest temperature 39.4; December 1st, .005c.c. reaction 12 hours after; December 4th .005, reaction 8 hours after; on 22nd .006, still produced reaction, temperature 39.2;

on 25th .04c.c., produced reaction, temperature 41.8°; 29th .006c.c., temperature 37.2°.

Among the 50 or 60 cases of phthisis which I looked into one-half were advanced cases, having reaction but reaping but little benefit. Some felt worse and were becoming opposed to a continuation of the treatment. Fully one-half seemed to be benefited and hopes were entertained that after longer treatment good results would be obtained.

In the Moabit suburb hospital, (visited December 31st) which consists of a series of one story buildings looking in the distance like a row of tents, four of the buildings were devoted to cases receiving the Koch treatment. Better results had been obtained here generally than in the Charité probably owing to the unexcelled sanitary conditions, and superior character of the interior arrangements. Prof. Koch gave personal attention to the cases here. Interested myself here chiefly in the cases where the effect of the lymph was aided by surgical operations in the wards of Dr. Sonnenberg and obtained the following information which appeared a day or two later in the *Deutsche Medicinische Wochenschrift*.

Four cases had been operated on by Dr. Sonnenberg during the month preceding my visit, December 31st, and on that day all were free from fever, and except one case were progressing favorably. The operation was done in the space bounded above by the lower edge of the clavicle; inwards by the edge of manubrium; outside by the pectoralis minor; below by the second rib, the pectoralis major drawn down. Chloroform was the anæsthetic used. The incision is made from without inwards about 12 c. m. long and 1½ to 2 c. m. below and parallel with the lower edge of the clavicle. The pectoralis major is cut through and the opening cleared with a blunt instrument to the periosteum and intercostal muscle. All hemorrhage is checked and the parts held apart by retractors. An incision is then made through the periosteum, along lower

edge of first rib, and the periosteum separated by a levator from the front of the rib. The intercostal muscle is then divided and the periosteum separated from the back of the rib with Langenbeck's *geiss fuss*. An arched piece is then removed from the first rib and cartilage with a grooved chisel or pliers and the opening cleared to the pleura. The intercostal artery is not injured and the upper part of the rib is left. If the surfaces of the pleura are adherent an exploratory puncture is made with a hypodermic needle to find the cavity. If blood appears in the syringe try in another direction, when the cavity is entered mucus will be aspirated. The cavity is opened by passing the pointed thermo cauter—heated to dull red—along the course of the needle, keeping in mind the position of the large blood vessels. But little matter flows out. The cavity is then explored with probes or the finger for communications from other vomicae and these are enlarged by the thermo cauter, making one cavity. It is then packed with sterilized gauze and one suture put in the centre of the wound, antiseptic gauze protective and bandage applied. The dressing is changed daily. If no adhesions are found, as happened in one case, a pneumothorax results. In this case it was circumscribed and the dyspnoea soon disappeared, and the pleuritis set up glued the surfaces together, after which the cavities were opened. In a few days after the reaction resulting from the operation subsides, the injections of Koch lymph were begun. In the three cases where adhesions had occurred the operation was well borne, no local or general complications. For a day or two there was considerable coughing and irritation, but it was easily allayed and no pain was complained of. The lung can be touched and burned without pain—unlike the pleura. When the eschar was thrown off the wound was larger and the effect of the tuberculin observed, which were well marked. Dr. Sonnenberg considered the lung tissue more susceptible to the action of the remedy than any other.

The first patient was a coachman (W. Meister) aged 36 years, with no hereditary predisposition, had suffered more or less since 1880 with all the usual symptoms of phthisis, including haemoptesis, had at the time of operation (15th Dec.) a cavity in right apex and infiltration in left. An injection of .005 c.c. tuberculin produced a slight reaction. On the third day after the operation the temperature was normal, when .005 c.c. produced no reaction. Slight reaction on two following days from 1 and 2 c.m.m. The doses were gradually increased, reaction always slight.

The second patient (G. Adams) aged 43, had no hereditary taint. His lung affection dated from an attack of pneumonia in 1886. Had lost 35 pounds during last three years. There was a cavity in the right apex and infiltration in left. He was operated on, on the 15th Dec., and on the 18th temperature had returned to normal, when the injections were commenced.

The third patient (W. Kippenhahn) aged 44, suffered since the spring of 1889 and had a cavity in left apex with consolidation in right. In all three the pleural surfaces were adherent over the cavity.

The fourth case (C. Feidler) aged 37, had been an invalid for over a year. Had constant fever during preceding summer and had lost in weight. A cavity existed at a point opposite the fourth intercostal space right side; dulness in left apex. Had continued fever up to the time of operation. The chest was opened in the fourth interspace. The pleural surfaces were not adherent and a pneumothorax was produced and an adhesive pleuritis occurred. After the symptoms of this subsided the cavity was opened.

In the *Deutsche Medicinische Wochenschrift* of February 5th, Dr. Sonnenberg reports that he had operated on another case since, and that the three cases first operated on were cured, and the last one as good as cured. Fiedler had succumbed. The lymph injections had no effect upon him, the tem-

perature being the same as before the injections.

In between three and four weeks after the operation in the three successful cases, the dose of tuberculin had reached 0.1 c.c. and when no reaction occurs with the dose it is repeated again after eight days. If reaction again occurred 0.1 c.c. was given every day until reaction ceased and wait again 8 days.

The cavities rapidly enlarged after the injections began, to two or three times their original size through destruction of the tubercle tissue and the breaking down of the walls between the main cavity and adjoining smaller ones. A profuse flow of pus and greasy caseous detritus come away leaving a healthy granulating surface. That this melting away of the affected tissue was owing to the action of Koch's remedy was proved in the last case operated on: no injections were given for 14 days after, when the changes above mentioned did not occur. They followed as soon as the injections were begun. No complications occurred. As the cavity gradually closed the secretion diminished and became less purulent and the bacilli were fewer in number. The patient's general condition has much improved, one gaining four pounds in the last week. No eruptions of miliary tubercle was observed near the cavities or wound. He doubts whether the small tubercles, sometimes seen near cavities or ulcers on larynx or tongue are real tuberculosis tubercles, as he has seen them disappear in 2 or 3 days after their appearance, and one which was removed three days after its appearance and examined showed softening but no bacilli.

He thinks it premature to formulate any rules of guidance in regard to the class of cases that are likely to benefit by the operation. There should be a fair general condition of body vigor, and a limited localization of the disease. It is useless where there is general infiltration.

When, from the effect of the lymph or otherwise, the cavity cannot be emptied

through the insufficiency of the bronchial outlet, and there is retention with continued fever, it will be indicated. Whether to use the lymph treatment for some time before the operation or not, or whether the chest should be opened before a cavity forms are points still to be determined. The cavities, at the time of the second report, were reduced to a *cul de sac* not larger than a pea, the original space being occupied by a connective tissue growth. A few bubbles would still escape on deep breathing, but the sinus was quickly closing, and the cases proved beyond doubt the perfect success of this new method of treating lung cavities in suitable cases.

On January 7th I visited the Victoria Park Hospital (City of London Hospital for diseases of the chest). Dr. Herron, who has charge of the cases treated here, is a firm believer in the efficacy of the remedy in suitable cases. He and the pathologist to the institution, Dr. Wetherhead, took great pleasure in describing the progress of their cases (25 in number), all of whom, without exception, showed more or less gain from the treatment. None of the cases were in an advanced stage of phthisis. The wards were remarkably cheerful, bright and airy, lacking no modern convenience, and well attended to. No case admitted unless bacilli were found in the sputum.

I can only briefly refer to some of the cases. H. B., aged 28, the first case, had tubercular infiltration in both apices with coarse rales and the usual physical signs. Bacilli in sputum. Father and mother and two uncles died of consumption. Was first treated on the 24th November. Owing to the small amount of deposit 0.1 was given as the second dose, giving reaction, 1 or 2 now taking 0.1 c.c. doses daily with but slight reaction. No bacilli could be found after 27th December. His general condition had improved, but the dullness at the affected points had not changed, and this might be said of most of the cases. Neither had they observed any increase of dullness to occur. The respirations in one case

during the decline of the reaction, suddenly rose to 72, with a pulse of 90, the temperature a few hours later becoming sub-normal.

Case 7 was considered a very good result of the treatment. He entered hospital four weeks before, suffering from severe cough, hæmoptisis, night sweats, had lost 14 lbs. during the preceding three months. Had gained 10 lbs since admission, five during last 10 days. No hæmoptisis after the second injection. No night sweats during last week. No bacilli discovered the day previous and at the two previous examinations they were lessening.

S. M. in hospital 5 weeks, had infiltration in both apices with an obstinate distressing cough. This ceased in three weeks after the treatment was begun. .002c.c. were given at first. No reaction until .006c.c. was given. This was increased until .1c.c. was given, which was not followed by any reaction, but a smaller dose next day, produced temperature of 104.8. Since then 10 doses, each .1c.c. had not given any reaction. The abnormal physical signs on right side had completely cleared up, and in the left side crepitation was less. The bronchial breathing had given away to harshness, and his breathing was slower and more free. Had gained six pounds.

It was observed, as a result of an injection in lung consolidation, that crepitant rales occurred in the adjoining portion of the lung, coming on in about six hours after and disappearing in 24 to 48 hours. The quantity of sputum was also greater.

Even in cases where no reaction occurred the sputum gave evidence of increased disintegration of tissue by the greater quantity of elastic fibres and even complete alveolar arrangements which were found.

Dr. Heron gave it as his opinion that every patient with tuberculosis should be given the benefit of the treatment or the physician would neglect his duty.

From what I witnessed of the effects of Prof. Koch's remedy for tuberculosis in Berlin and London, I cannot but conclude

that all that its discoverer has claimed for it has been justified by the results obtained. So far we have abundant proof of at least a temporary cure in lupus, laryngeal and pharyngeal tuberculosis, and in phthisis pulmonalis when the disease is in an early stage, and of all tuberculous deposits where easy exit can be obtained for the disintegrated tissue and they contained bacilli. That surgical assistance in advanced lung tuberculosis, as suggested by Prof. Koch, may in many cases secure a ready discharge for the dissolving structures where it would not otherwise occur, thus avoiding the probability of a reinfection of the system from freed bacilli. It is now more important than ever before that physicians should recognize this insidious disease in its earliest stages. In all cases of cough where resolution does not soon occur under the ordinary medication, the sputum should be examined for bacilli, or the diagnostic feature of the lymph utilized. In this way we may hope that an advanced and incurable case of phthisis will become a rarity and a reflection on the patient for neglect of his case or on the physician who may have had him under observation when his case was curable.

Although the remedy has been tested in all parts of the world, and the reports indicate results all the way from those which are exceedingly unfavorable to those where undoubted and striking benefit has been obtained, nothing has been noted which renders necessary a change in the statement regarding it first made public by Prof. Koch and reiterated in his second communication of January 15th, 1891, when he states: "All I have lately seen is in harmony with my former observations and I have nothing to retract of what I have before stated." Tuberculin has a specific effect on lung tuberculous tissue, leading to its rapid disintegration, and when the necrotic products can be readily thrown off good results are obtained as in external tuberculosis or in the larynx or pharynx, and when a limited portion of lung tissue is effected, with

unobstructed drainage into bronchial tubes. Where the favorable conditions are absent, benefit is not so certain, and, as has been pointed out by Prof. Virchow and other pathologists, the artificially necrosed tissues loosened in parts where the products cannot readily be thrown off, may set free bacilli, which, passing into the lymphatic vessels, stud the tissues in the vicinity of the diseased focus with an abundant crop of fresh nodules, or getting into the blood current, directly or through the lymphatics, may cause a more or less general eruption of fresh miliary tubercles or tubercular infiltration. The fact that such can develop during the course of treatment with tuberculin has been adduced to disprove the specific action of the remedy on new tuberculous tissue, but much has yet to be learned as to the exact manner in which the remedy affects the necrosis. The tendency in the lymphoid, epitheloid and giant cells, characteristics of tubercle tissue, is to a process of cheesy degeneration, and the surrounding of the abnormal tissue by the leucocytes with a barrier wall. Does the increased proportion of bacillary product in the blood, represented by a dose of tuberculin, simply accelerate this change already begun, leading to rapid softening of the tissue and the formation of a strong inflammatory zone around the foreign growth cutting off the blood supply, as occurs in cases where, without any specific treatment healing of the lung occurs—or is its action explained by the theory advanced by Prof. Watson Cheyne? He attributes the formation of tuberculous tissue to the irritative action of the products of the bacilli and supposes that tuberculin has a special affinity for these chemical poisons and that by a chemical combination, a new and highly irritating body was produced which led to rapid necrosis. The latter explanation can scarcely apply in view of the evidence of the post mortems described by Prof. Virchow, where tubercles developed during the course of the treatment. Kromayer's conclusions in a recent number of the *Deutsche*

*Med. Wochenschrift*, throws some additional light on this important point. He states that tuberculin acts only on tubercles which are peripherally vascularized—a condition not found in very young or very old tubercles. This limited action of tuberculin would indicate also that in tubercular infiltration, where no tubercles are produced, only scattered masses of epitheloid cells in gratulation or young fibrous tissues—the remedy could not be so effective.

Prof. Koch considers the action of tuberculin to be that of a protoplasm destroyer by producing coagulative necrosis. This condition of the cell inhibiting the further growth of the bacilli and tends to their destruction. Artificially introduced into the circulation, this process is accentuated at the point infected, and extended further from the bacilli lessening their chances of being nourished; an inflammatory limiting zone thrown around such a focus should complete the arrest of the tuberculous growth. That some normal element is irritated by the remedy is shown by the reaction that can be produced in a healthy person by a large dose. The cases of Leukæmia, which I have mentioned, where doses similar to those which produce a reaction in the presence of tuberculous tissue, gave rise to reaction, would seem to support the views of Prof. Koch, that the white blood corpuscles or their modifications are the susceptible elements.

It would seem from the fact that submiliary tubercles and old ones or masses encapsuled are not affected, that the remedy acted chiefly on the inflammatory tissue which is normally thrown around tubercular foci formed of the migrated leucocytes and that the specific action of the remedy obtains in these corpuscles thus modified by the tubercle virus, accentuating the inflammatory and degenerative changes. We must, however, await further observations, clinical and post mortem, for a true solution of the question how the necrosis is brought about. The potency of tuberculin in this respect necessitates



great caution in using it, and entails considerable responsibility, judging from the untoward results which have been reported. Not only must careful observations be made as to the exact physical condition of the patient, but the fact that the remedy brings to light unsuspected foci must not be lost sight of. Some of the unfavorable consequences are hæmorrhage, perforation of the intestine, the production of necrotic tissue which cannot be got rid of quickly enough, the retained substance undergoing further degenerative change causing hyperpyrexia and symptoms of septicæmia, excessive inflammatory changes in the lungs, pleura, etc. If with an exact knowledge of the patient's condition one proceeds cautiously with small doses, accidents are not likely to occur, but, as they have occurred under these circumstances, patients submitting themselves to the treatment should be fully warned of these possibilities which, fortunately, are very exceptional.

The fact that, by improved hygienic surroundings, open air exercise, and the application of all those means which are known to favor the production of a more vigorous condition of the general health, we can only in a certain proportion of cases bring about a resolution of incipient phthisis, and that this has been the only means of hope we have been able to hold out to those afflicted with pulmonary tuberculosis, led to an exaggerated expectation on the part of the mass of the profession, and especially the public, as to this supposed absolute specific. The pendulum has just now swung out in the other direction and we hear chiefly of the failures, but already it is moving backwards and from the most reliable sources, among the vast number of experimenters throughout the world more favorable results are being obtained, and as our knowledge will increase in regard to the best methods of applying the remedy and the conditions suitable for its application, we will realize *Tuberculinum Kochii* to be one of the most valuable additions to our list of remedies which this cen-

tury has witnessed, and second only to the remedy we hopefully await for, viz.: one capable of destroying the living germs as they exist in the living tissues, without injury to the host.

## Society Proceedings

### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

*Stated Meeting, January 23rd, 1891.*

F. J. SHEPHERD, M. D., PRESIDENT, IN THE CHAIR.

*Continued from page 130.*

*Case 2.*—In this patient very much the same conditions were present. He was an older (28) and stronger man. Consolidation at right apex. There had been slight hæmoptysis. Bacilli and elastic tissue in sputum. The temperature, taken every two hours day and night for six days before treatment began, never went as high as 99°. The best reaction was obtained from the second injection (of 0.002 c.c.), when the temperature reached 101°.

*Case 3.*—This was a case of tubercular laryngitis with left apex dullness. History of hæmoptysis. No bacilli. The temperature after the first injection went to 103°, but no such reaction has since been noted.

Dr. Jas. Bell reported as follows:—

(1) G. M., aged 6 years, a waif left on the wharf in the autumn of 1889, with advanced hip-joint disease and serofulous sores about the face, neck and body. In May, 1890, the hip-joint was excised, the whole neck and head of the femur and the upper two-thirds of the great trochanter being removed. Patient recovered with a good, useful limb and good mobility. During the summer he developed tubercular disease of both testicles. The left which was completely disorganized, was removed in November, and the right, which was simply felt as a hard nodular mass of epididymus, was left alone, as it seemed to be in a quiet, non-progressive condition. Good recovery followed operation. Patient was injected on December 23rd, the dose given being .0002 gm.; no reaction followed. On the 29th he was injected again, the dose being .0003 gm. Only slight general and no local reaction followed, the temperature only reaching 99°, injections then discontinued.

(2) C. H., aged 25. Suppurating disorganized testicle. Diagnosis doubtful. No family history of tuberculosis. History of posterior gonorrhœa for about six months, when acute orchitis super-

vened, ending in suppuration in August last (1890). Hardness of epididymus and pus discharging sinuses remained. Injected on December 25th dose .002; no reaction. Dec. 27th, injected again dose .004 grm.; slight heaviness and temperature rose to 99°F.; no local reaction. Injections were then abandoned and the testicle removed a few days later. The testicle (shown at the meeting) was literally filled with tubercles, which were pronounced by Dr. Johnston to be not of very recent origin, and not attributable to the injections.

(3) N. B., aged 26. Diagnosis doubtful. Thought to be tubercular disease of the bladder and kidneys in an early stage. Symptoms: frequent and painful micturition; blood in small quantities at end of micturition; urine containing pus in considerable quantities; intense albuminuria; emaciation. Symptoms lasting 2½ years, and coming on as a sequel of posterior gonorrhoea; temperature ranging from 99° to 100°F. before injection. Injected on the 21st of December dose .002; no reaction, general or local. Again on the 22nd, dose .004; no reaction, general or local. Injections discontinued and patient discharged at his own request.

(4) A. M., male, aged 25. Had suffered for five years from bladder irritation, with pus and blood in urine. Never had gonorrhoea. Left testicle had all the characters of tubercular disease of that organ. A nodule had existed in the lower end of the epididymus for more than a year, and a little local suppuration had occurred twice, leaving a sinus which discharged for some time. Sinus was now closed. In September a perineal section had been performed, but had failed to give him relief. On the 1st of November Dr. Bell had opened the bladder above the pubes, and with the aid of the electric light scraped and cauterized several tubercular ulcerations around the neck of the bladder. The bladder wall was found to be studded with tubercles which had not yet broken down. Prompt and satisfactory relief had followed the operation, and the patient's general health had improved greatly. Patient was injected on account of the tubercular testicle and the tubercles known to exist in or beneath the mucous membrane of the bladder. He was injected as follows: Dec. 20th, .001 grm.; slight and general reaction. Dec. 21st, .004 grms.; marked febrile reaction, pain and tenderness in testicle, and increase in pus and albumen in urine. This patient was injected again as follows: Dec. 24th, .006 grms.; Dec. 30th, .008; Jan. 19th ('91), .006. The same symptoms of local and general reaction followed each injection, and after the last injection some blood was found in the urine for the first time since the supra pubic operation, performed on the 1st of November. This patient is enthusiastically hopeful, and has gained three pounds since the treatment began. As his general health has

been steadily improving since the operation on the 1st of November, and no observations as to his weight had been made prior to the use of the parataloid, this slight increase of weight must not be given too much prominence as an evidence of the curative effects of the remedy.

(5) A. D., a little French-Canadian child aged 5 years, suffering from a tubercular knee-joint of eighteen months, standing, but in early and quiescent condition, so that the child could walk almost without a limp, and could extend the leg fully. This little girl had been under observation for eight days before any injections were given her. During this time she was carefully examined and her temperature, which was taken every four hours, was uniformly normal. She was given the first injection 24th of December; dose, .0002 grms.; distinct local and general reaction followed. The knee became red, hot and painful, and increased a quarter of an inch in circumference, while the temperature rose to 101°F., and the child was very drowsy and sick at her stomach. The reaction began about eight hours after the injection, and the temperature had reached the normal again within 24 hours. The knee, however, remained a little tender, and lay in a position of increased flexion. She was injected again as follows: Dec. 28th, .0003; Dec. 31st, .0004; Jan. 8th (1891), .0005; Jan. 14th, .0005; Jan. 19th, .0005 grms.—six injections in all. The same symptoms and local signs followed each of these injections—the knee on one occasion increasing three-eighths of an inch within a few hours, and the highest temperature reached being 103°F. The local manifestations on each occasion subsided a little later, and less decidedly than the constitutional symptoms. At the present time (Jan. 23rd) the knee is half an inch larger than when the first injection was given. The knee is semiflexed, and is painful and tender, so that the child cannot be induced to put the foot to the floor, nor can she allow the leg to be extended. In short, the knee had grown very rapidly worse under the treatment.

In recapitulation, Dr. Bell said that while the first case was beyond all doubt a markedly tubercular child, no reaction had followed the injection. This might be explained, however, by the fact that all the tubercular lesions, with the exception of the right testicle, had been removed. The second case had not reacted, although the testicle, when removed, was filled with tubercles which must have developed within six months. The third case was doubtful, and, although no reaction followed the injections, was probably tubercular. The fourth case showed clearly that a change of some kind had taken place in the diseased organs. The fifth case, however, gave the most undoubted evidence of the power of the parataloid, but this power was shown, so far, not in a curative effect, but the reverse, as the joint disease had been

apparently greatly aggravated by it. On the whole no cures had been effected, nor even distinct improvement, nor had it proved serviceable as a diagnostic agent, but, with possibly one exception (the last case), no ill effects had been observed from its use.

Dr. Johnston said that he had examined the sputum daily for tubercle bacilli in Dr. MacDonnell's three cases; Dr. Smith, house physician to the General Hospital, having assisted him in preparing the specimens. The sputum had been examined daily for a week before commencing the treatment. Up to the time of speaking no change had been noticed in the sputum. The number of bacilli had remained stationary. In the case of tubercular laryngitis no bacilli had been detected. The testicle extirpated by Dr. Bell had the ordinary appearances of a tuberculous testicle. Microscopically it showed no unusual amount of necrosis.

In one of the cases of lupus, that of the old woman, tubercle bacilli had been found in the sections, but were very scanty. The lupoid tissue was free from any unusual appearance. In the other lupus case, that of the young girl, there was marked proliferation of the endothelial cells in the small vessels, showing an intense, acute inflammation. These observations confirmed the statement which had been made that the action of the lymph upon human tuberculous tissue was quite different from what had been observed in the case of guinea pigs. In the human subject the condition seemed to be one of irritation, not degeneration, about the young tuberculous tissue. The effect of the treatment upon the sputum would only be secondary, as the living tuberculous tissue did not come away with the sputum.

*Discussion.*—Dr. McConnell remarked that he had seen some good results from the treatment. To get a good effect from the remedy he considered it necessary to build up the system. In Dr. Bell's case of tuberculosis of the testicle, he thought that from such a small amount of tuberculous material we could not expect much reaction. He would present his report on the subject at some future meeting of the society.

Dr. Mills referred to a case of hemorrhage which had occurred after the injection of Koch's lymph.

Dr. Hingston said that he had just begun the injection of the lymph. He thought that it was still in its probational period. Dwelling upon lupus, he remarked that one thing seemed to have been forgotten, and that was, that some cases of lupus without any treatment whatever will get well. Dr. H. could recall several cases during his practice of cure. He agreed with Dr. MacDonnell that patients with tuberculosis of the lungs should be selected with great care, and should be examined for days and days before the Koch treatment was adopted.

Dr. Shepherd, referring to the case of lupus in the old woman, remarked that she had pre-

viously been under his care for seven or eight years. The diseased area had been cauterized and scraped several times. She had improved temporarily. Since the injection of the lymph had been begun he considered her condition worse. In the second case of lupus, that of the young girl, after the injections had been discontinued for two weeks, there was a great reaction, which probably shows an accumulative action in the lymph. He had not yet seen any report of absolute cure of lupus from this treatment. The Vienna results had not been very promising. There had only been one case of apparent cure. As to its diagnostic power, reaction had been noticed in cancer cases in New York. It was also known to light up latent tubercular foci.

Dr. Roddick asked Dr. G. T. Ross if he had seen in Berlin any operation performed for surgical tuberculosis subsequent to the use of the lymph; also, if he had seen any autopsies on other cases than pulmonary tuberculosis; and, thirdly, whether the accumulative effect had been noticed.

Dr. G. T. Ross said that he had seen slight hemorrhage follow the remedy, which had to be discontinued for a few days. Many of the cases which he had reported had been carefully examined by able men before the injection of the lymph was commenced. He admitted that good diet and good surroundings improved many cases of phthisis, yet he believed that the improvement in the cases that he had seen was to be attributed to the lymph. He had not seen any surgical operation after this treatment, nor post-mortems in any other case than that of phthisis. Referring to the results that had been obtained here, he believed that the dosage had been too small, particularly in cases of local tuberculosis.

Dr. Bell stated that the dose, though small, had produced very severe reaction.

Dr. Roddick remarked that in a case of lupus injected with 1-10 cm. slowly increased had produced great reaction. He had seen one case in Baltimore where the patient, after the injection of 2-10 cm., had become seriously ill.

#### *Examination of Sputum for Tubercle Bacilli.*

—Dr. Johnston demonstrated the method of examining sputum for tubercle bacilli which he employed in the Montreal General Hospital. The cover-glasses were smeared with sputum by means of a thick platinum wire, the end of which had been flattened out to form a small spatula. When dried, it was fixed in the usual way by passing through a flame. The staining was effected by placing a drop of carbol. fuchsin solution (magenta, 1 gm.; alcohol, 10 c. cm.; 5 per cent. carbolic lotion—90) upon the smeared side of the cover-glass and holding it in a small flame till bubbles rise, allowing it to boil gently for half a minute or less. After spilling off the excess of staining fluid, the cover-glass was immersed in acid methylene blue (methylene blue 2 grammes, 25

per cent. by volume; sulphuric acid 100 cc.), and allowed to remain there for one minute. It was then examined directly in water, or could be dried and mounted in balsam if desired. In most cases this examination could be made in less than five minutes.

*Stated Meeting, February 6th, 1891.*

F. J. SHEPHERD, M.D., PRESIDENT, IN THE CHAIR.

*Hæmatoma of the Ovary.*—Dr. T. J. Alloway exhibited two interesting specimens of hæmatoma of the ovary. In one ovary, the larger of the two, a cavity existed in the oöphoron portion of the ovary which contained about three drachms of dark, tarry blood. This cyst ruptured on the ovary being brought to the surface for ligature. In the second specimen the cavity of the ovary contained a hard, dried, coffee-colored blood-clot about the size of a marble. Dr. Alloway said that the ladies from whom these ovaries had been removed were young women between the ages of 25 and 30, one married and the mother of one child. They were chronic invalids, and had been so for some years. The first case was operated on ten months ago; she was now in robust health and acting in the capacity of trained nurse. The other case had been but recently operated upon, and was improving. He said that he had now exhibited three cases of this rare pathological condition before the Society. He thought the condition more common than was generally supposed. The symptoms were the same as those seen in hyperæmia of the ovary and chronic ovaritis unless rupture takes place, when alarming shock and collapse will follow, according to the amount of blood lost. He had no doubt that follicular hemorrhage was a frequent cause of intra-peritoneal hæmatocele. It was due to excessive ovarian congestion and escape of blood from the larger deep-lying veins into one or more ruptured vesicles. The number and size of the hæmatoneal sacs were in direct proportion to the extent of congestion.

*Contortion of the Fallopian Tubes.*—Dr. Alloway also exhibited this specimen. He explained that this is a twisting or bending of the tube upon itself irrespective of inflammatory adhesions. He said that Dr. Haultain of Edinburgh had recently drawn attention to this peculiar condition saying that it was in his experience, the most frequent morbid condition of the tube met with, and that it gave rise to very distress-symptoms. Sterility and dysmenorrhœa are the two principal associated conditions found in connection with *contortion* of the Fallopian tubes. In regard to the ætiology of this lesion, he said it was very difficult to offer an explanation, but it was thought that it had something to do with developmental irregularity. Before birth the Fallopian tube is in a state of contor-

tion similar to the specimen exhibited, and it is not till puberty that, by a gradual process of straightening, it has acquired its normal undulating form, so that this condition may really be a continuance of the fetal state. This, however, would not explain cases that occurred after pregnancy had taken place, but under such circumstances it is thought there was an inherent tendency on the part of the tube to return to its fetal state.

*Aneurysm of the Aorta simulating Aneurysm of the Innominate.*—Dr. R. L. MacDonnell related the history of the case, which was briefly as follows: W. H. (colored), aged 33, barber, was admitted to the hospital in October last with an apparent pulsating tumor over the innominate artery. The patient had formerly been a Pullman car conductor. There was no history of syphilis or intemperance. In August last he began to suffer with severe pain in the right side of the neck, and behind the right ear; subsequently pain was felt in the upper axillary region of the chest, and in the right shoulder, which he believed to be rheumatism. He then came under the notice of Dr. J. A. MacDonald, who advised him to enter the hospital. On admission there was slight bulging of the chest, and dulness on percussion over an area of two and a half inches in diameter, occupying the space between the clavicle and the sternum. The pulse was not perceptible in the right radial, brachial, carotid or temporal arteries. There was tracheal stridor and weak breathing at the left pulmonary base; no tracheal tugging; no laryngeal paralysis. The diagnosis was aneurysm of considerable size involving the innominate artery, and possibly the ascending arch. The absence of tracheal tugging and laryngeal paralysis, together with weak breathing at the base of the left lung, rendered an involvement of the transverse arch highly improbable. No symptoms pointed to the third part of the arch or the thoracic aorta. In Dr. MacDonnell's experience, the tracheal tugging was met with when the transverse arch was enlarged and rested on the left bronchus against the angle which that tube forms with the trachea. When the aneurysm occupied a point on the transverse arch beyond the crossing of the left bronchus, the tracheal tug was not perceptible; since the tumor dragging down the loop formed by the vagus and the left recurrent nerves (which bend around the aorta behind the root of the left lung) produced pressure upon the left bronchus from behind, this pressure was incapable of making a pulsatile impression on the left bronchus such as to be transmitted to the larynx. The patient was put to bed and 10 grains of the iodide of potassium ordered daily. He left the hospital Dec. 6th, feeling much better, almost free from pain, and no apparent increase in the size of the tumor. He was readmitted Jan. 23rd with great dyspnoea;

the tumor had increased considerably in size, bulging from the chest-wall as large as half a cricket ball; it was pulsatile, and its walls were thin. The pulse in the right wrist was now present, though small. Death took place in six days. The reappearance of the pulse was attributed to the rapid enlargement of the tumor in the direction of the front of the chest, which relieved in a slight degree, the pressure upon the innominate, and allowed the blood to flow again through the vessels.

Dr. Johnston exhibited the specimen. It was situated at the junction of the first and second part of the arcus aortæ. The innominate lay just within the sac; another sac lay in direct contact with the innominate artery all the way to its bifurcation, and was closely bound to it by inflammatory connective tissue. The sac was as large as two fists, and had eroded the first and second ribs in the right supra-clavicular region. The anterior wall of the sac was formed by the pectoralis major. The sac contained a large amount of fibrin, not very firm. The great arteries and veins were free. The sac lay in front of the trachea and pressed upon the right bronchus. The left bronchus was quite free of the tumor. The recurrent laryngeal nerves were normal. There was intense tracheitis, with an ulcer on the anterior wall of the trachea one and a half inches above its bifurcation. There was acute broncho-pneumonia of the right lung.

Dr. James Bell was interested in the case, inasmuch as the patient had originally been sent to his wards for surgical treatment. Ligature of the carotid and subclavian had suggested itself, but an examination revealed the fact that these arteries were already occluded. The absence of syphilis in the history, and of any atheromatous change in the vessels, together with the comparative youth of the patient, were very remarkable. He spoke of the cases recently reported by Macewen where the formation of white clot was artificially produced by pricking the sac through and irritating its inner surface with fine needles. Encouraging results had followed this treatment in the four cases reported by Macewen, in two of which the results were verified by subsequent post-mortem examination.

Dr. Geo. Ross regarded the case as being most interesting, but it was not in his experience a very unusual thing to find innominate aneurysm closely resembling in its symptoms and physical signs aneurysm of the arch, or *vice versa*, and he had already a case closely resembling that brought before the society by Dr. MacDonnell. A correct diagnosis was impossible under the circumstances of this case. The points brought forward by Dr. MacDonnell with regard to tracheal tugging were interesting, though he was not prepared entirely to agree with the opinions expressed. He was under the impression that tracheal tugging could be produced by an aneurysm pressing upon the

trachea from in front and exerting pressure downwards as well as backwards. He must, confess, however, that the result of the autopsy in the case before the Society strongly supported Dr. MacDonnell's view of the causation of this physical sign, and the aid it could afford towards the localization of the tumor. In the present state of our knowledge relating to the localization of thoracic aneurysms, surgical interference with innominate aneurysms will always be extremely hazardous. It is very desirable that all cases presenting themselves, in which it is difficult to determine whether a given aneurysm is innominate or aortic, should be most carefully examined and reported, so that some points might be determined by which to establish the diagnosis.

*Round Ulcer of the Stomach causing Fatal Perforation.*—Dr. R. L. MacDonnell stated that the patient, a woman, aged 59, had been under his care in the Montreal General Hospital up to about ten days before her death. Her case was interesting in the duration of the symptoms. The patient, who had been a needlewoman, began to suffer from pain and distress after food, with occasional vomiting, some twenty years ago. She was supposed to have dyspepsia up to 1877, when she was first seen by Dr. G. E. Fenwick, who noticed the "coffee-ground" appearance of the vomited matter. He elicited from the patient that she had been vomiting a darkish fluid for some years past. She was then suffering from severe pain in the epigastrium, vomiting after food, and hæmatemesis when she entered the hospital, and was under treatment for gastric ulcer for six weeks. She derived much benefit. With the exception of slight epigastric pain, she remained free from severe symptoms until 1888, when she was again admitted complaining of severe pain and vomiting after food. There was no hæmatemesis. She recovered, and continued apparently well till the beginning of this year, when she again applied to the hospital with symptoms of gastric ulcer. She was admitted under Dr. MacDonnell. The patient was now much emaciated; the abdomen was very flat, and its walls extremely thin. There was diffuse tenderness over the epigastrium; no tumor perceptible. The patient was kept in bed several days and her symptoms carefully watched. Milk diet was ordered. Gastric distress was noticed to increase until evening, when vomiting gave her relief. It was thought that the symptoms pointed to cicatrized ulceration, which was probably delaying the advance of food through the stomach. A soft tube was therefore introduced every day at 4 p.m. and a pint of water slowly passed through it. The discomfort was relieved, no vomiting occurred, and she was able to sleep without epigastric discomfort or pain. At the time of her leaving the hospital she was free from pain and able to take most of the common articles of diet without

discomfort. On her return home she ate freely of what was going, when she was taken suddenly ill, and in a few minutes was in a condition of collapse. She was seen by Dr. W. G. Stewart. There was very severe pain at the epigastrium, and copious vomiting of a "coffee-ground" fluid. He was aware previously that the patient was the subject of gastric ulcer. He was unable to afford her any relief. At the autopsy, when the abdomen was opened, the ulcer was plainly visible in the right half of the epigastric region, and it presented a decidedly punched out appearance. The ulcer was situated near the pylorus, close to the lesser curve; its edges were raised, and there existed much thickening of the surrounding gastric wall. The stomach was moderately dilated. The abdominal cavity contained about a pint of "coffee-ground" fluid similar to that which had been vomited. There were evidences of general peritonitis.

*Obstruction of the Cystic Duct; Cancer (?) of the Gall-Bladder.*—Dr. Johnston exhibited this specimen for Dr. Molson. It showed a large calculus the size of a pigeon's egg in the cystic duct, two inches above the junction with the common duct. A small calculus the size of a bean lay just at the orifice of the ductus communis choledochus. In the region of the gall-bladder was a ragged, fibrous mass as large as an apple. Examination of this tissue under the microscope showed a dense fibrous stroma, in which a large number of lymphoid cells were found. The microscopic appearance of the growth was not that of cancer.

Dr. Molson remarked that the patient was 64 years of age; fairly well nourished. There was a history of frequent vomiting, which always yielded to careful dieting. Two weeks previous to her death there was incessant vomiting, which proved uncontrollable, although every remedy that could possibly relieve her had been tried. There was no pain, no sign of jaundice, and nothing could be made out by examination. The patient gradually died of asthenia.

Dr. Campbell asked if there had ever been any history of biliary colic.

Dr. Stewart wished to know how Dr. Molson explained the vomiting.

Dr. Shepherd remarked that, according to Tait, jaundice was of rare occurrence with only one or two calculi in the gall-bladder. He believed the condition might have been benefited by an operation.

Dr. Molson replied that there had been no history of colic, and that the vomiting was probably purely reflex.

*Diabetic Coma.*—The subject of acetonuria having formed the subject of an interesting paper recently read before the Society prompted Dr. J. A. Hutchison to report a case of diabetic coma which had lately been under his care:

J. D., aged 50, was brought home from work in the morning of Nov. 13th in an exhausted

condition. When seen by Dr. H. he complained of loss of appetite and constipation. On the following day the patient was very drowsy, and could only be aroused with difficulty. The case now appeared to be one of uræmic intoxication. The patient's previous health had always been good. He had been a soldier, led a fast life, and drank a great deal but for the past twenty years he had been steady and regularly at work. There was no history of syphilis. For twelve years he had been passing an abnormally large amount of urine, but no attention was paid to it. Lately the amount of urine increased; there was marked loss of appetite, great thirst, and obstinate constipation. The patient was now considerably emaciated; the skin dry and sallow. Four to five quarts of urine were passed a day. It was of a pale straw-color; spec. gr. 1032. Fehling's test gave a large deposit of oxide of copper. On Nov. 19th, the third day under observation, the patient felt better and was able to move about the house. On the morning of the 20th he became very dropsical; breathing was slightly stertorous, and the pupil of one eye dilated (the other eye had been destroyed some years ago). The pulse could be faintly felt at the radial. During the day coma increased until death ensued at seven o'clock that evening, one hundred and twelve hours from the time he had left his work. The urine had been chemically examined by Dr. Ruttan. No acetone was found.

Dr. Hutchison remarked that the case was interesting to him from the fact that such advanced disease should have given rise to so few symptoms, that a physician was never consulted until a few days before death. An abstract of the autopsy performed by Dr. Johnston was as follows: "Body of a spare, emaciated man; skin sallow, rough and dry. Heart and lungs showed nothing special. There was slight cloudy swelling of the kidneys, with several large clear cysts in the centre of each organ. Intestines and stomach were normal. The supra-renal capsules and semilunar ganglia showed no gross pathological changes. Brain: pia, thick and opaque over the convolutions, was readily detached; sub-arachnoid fluid was abundant, and the posterior cornua of the lateral ventricles were dilated. Throughout the cortex, as well as the white matter, ganglia at the base and medulla, the brain cut with resistance. This was probably due to an atrophic change, with a relative increase of the connective tissue."

*Cystic Degeneration of the Placenta.*—Dr. C. O'Connor exhibited this specimen, which showed extensive mucoid change and enlargement of the villi of the chorion. The patient, aged 32, had been delivered of two full-grown children. There was no history of syphilis. On examination the os was found partially dilated, placenta presenting, and considerable

bleeding. The vagina was tamponed and Dr. Telfer called in, who anesthetized the patient. The os was dilated with the fingers, and an enormous quantity of cysts removed, sufficient to fill an ordinary wash-basin. The uterus then contracted firmly and the hemorrhage ceased. Creolin douche was given and a hypodermic of ergotin. The loss of blood had been considerable; the patient was blanched, almost pulseless, and the extremities cold. Frequent hypodermics of brandy were given. At eleven o'clock next morning the pulse was 126 and temperature 99°. She steadily improved and made a good recovery.

Dr. Telfer confirmed Dr. O'Connor's report.

Dr. Reddy, in referring to these cases of cystic degeneration or hydatidiform mole, believed that there was a loss of vitality in the ovum, which disappeared early, and the placenta went on to cystic degeneration.

## Progress of Science.

### SYPHILITIC ALOPECIA.

Syphilitic alopecia was noticed by medical writers in the sixteenth century, and Shakespeare makes a distinct reference to syphilitic alopecia in *Timon of Athens*, Act iv, Scene 3, where Timon urges Phrynia and Timadra to assist him in his general curse of mankind. "Make curl'd-pate ruffians bald," says that misanthrope. Professor Fournier, in a course of lectures recently delivered at the Hôpital St. Louis, stated that only one in twenty of his private syphilitic patients lose their hair to any appreciable degree. Alopecia is by far most frequent in the asthenic form of syphilis, where great debility and general disturbance occur, with relatively trifling specific symptoms, in patients not necessarily feeble. Yet this alopecia is not a result of pure debility or of a family tendency to baldness, as it is occasionally seen in its severest and most rapid form in the mildest cases of syphilis. Professor Fournier states that specific baldness comes on between the third and the sixth month. In carelessly treated cases this symptom may be delayed till the course of the second year, but never later. The baldness of middle-aged men has, as a rule, nothing to do with syphilis. Syphilitic alopecia may be purely symptomatic, being caused by pustular and other syphilides of the scalp, or essential. The latter form is the more frequent; the hair falls out without any cutaneous irritation, redness of the scalp, or headache. Lesions of the bulbs have been described. There is a general tendency either to free thinning of the hair or to patchy baldness, but these different types are often mixed, and when soli-

tary are irregularly diffused over the scalp. The patches are never so free from hair as in tinea decalvans. Syphilitic alopecia is never permanent, according to Professor Fournier. At the end of five or six months the hair begins to grow again, even when the case is not treated. The beard and moustache are often attacked. The eyebrows often suffer and undergo a change, particularly prominent in young men. In youth the hair of the eyebrows are thick and regular, and lie smoothly. When attacked by alopecia the hair becomes thin, and those which remain stick out in all directions. Sometimes there are bald patches as well. These changes constitute what is known in Paris hospitals as the *signe d'omnibus*, as a patient is thus rendered diagnosable, even in a public vehicle. In tinea decalvans of the eyebrows all the hairs fall; in piliary keratosis, which is congenital, the skin of the brow is reddened.—*Brit. Med. Jour.*

### DIET IN CHRONIC BRIGHT'S DISEASE.

Dr. Nikolas S. Zasiadko, of St. Petersburg (*Vratch*, No. 39, 1890, p. 889) has carried out a series of comparative clinical experiments on ten patients suffering from chronic nephritis, his object being to elucidate the influence of a vegetable, animal, and mixed dietary on the course of the disease. In each instance the experiment lasted thirty days, during the first ten of which the patient was kept on a vegetable diet, during the second ten on an animal one (with the addition of some bread), and during the third period on a mixed diet.

It was found that:

1. Under the influence of vegetable food, the daily amount of albumen in the urine markedly decreased; the arterial tension sank, dropsy considerably increased; the pulse became slower, weaker, and more easily compressible; the appetite was gradually lost; the general state grew worse, the patient becoming weaker, apathetic, etc.

2. Under the influence of animal food, the daily quantity of albumen in the urine markedly increased; the arterial tension rose; oedematous swellings were diminished; the pulse became more frequent and fuller; the body weight decreased *pari passu* with the disappearance of dropsy; the daily amount of the urine, the proportion of its solid constituents, and specific gravity increased; the general state improved, the patient growing stronger, more cheerful, etc.

3. A mixed diet stood midway in its effects, but came nearer to the animal one in regard to its influence on albuminuria.

4. The proportion of albumen in the urine *per se* affords no criterion for determining the gravity of the renal lesion. The patient's dietary should also be always taken into considera-



tion, as the ingestion of an abundant proteid food raises the said proportion by causing a "dietetic albuminuria," which quickly disappears on decreasing the quantity of food proteids.

5. In view of the fact that chronic Bright's disease (a) consists in a general affection of the vascular system and not of the kidney alone and (b) is accompanied by a profound alteration of the blood, characterized by an increased proportion of water and a decreased proportion of proteids, hæmoglobin, and morphological elements, rational treatment should consist in raising the patient's general nutrition by means of a liberal diet abounding in proteids. Such diet does not give rise either to any renal irritation (hæmaturia, hæmoglobinuria, exacerbation of the renal process), or to uræmia.

6. The best dietary for chronic Bright's disease is a mixed one. In interstitial nephritis accompanied by general weakness, animal should predominate over vegetable food; in parenchymatous nephritis with profuse albuminuria, vegetable food with milk should be in relative excess.

7. Roasted or cooked Italian chest-nuts markedly diminish the proportion of albumen in the urine, owing to their containing tannic acid.—*Supp. Brit. Med. Journal.*

#### CREOLIN: ANTISEPTIC OR TOXIC?

Some important evidence as to the action of creolin on the human subject may be gathered from a thesis on that compound published at Breslau during the course of this year. Dr. Bitter, the author, notes that creolin has already been used in more than 2,000 midwifery cases at Breslau. As appears to be the case with nearly every new compound of the kind, the results, according to Drs. Born and Bitter, are most encouraging. In four of the midwifery cases, however, symptoms of poisoning occurred during the administration of a course of creolin injections. Three of the patients were suddenly seized with feelings of restlessness, anxiety, nausea, darkness before the eyes, and a tendency to syncope. The most peculiar feature in these cases, was a strong flavor of tea or smoke in the mouth, of which all the patients complained. This symptom lasted for a long time, while the nausea, etc., disappeared immediately upon the discontinuance of the vaginal injections of creolin. The fourth case was more severe; the patient suffered from great restlessness and prostration for several days after the injections were left off. About thirty-six hours after the beginning of the attack the urine, drawn off with the catheter, was very dark and strongly albuminous. Within a few days these symptoms of acute nephritis disappeared. Dr. Bitter advocates creolin as superior to other disinfectants on account of its "relatively" (*sic*) non-

poisonous qualities, its excellence as a deodorizer, and its blandness when applied to skin, mucous membranes, and wounds. It neither dries the vaginal mucosa nor causes any contraction of the canal. Creolin has no special hæmostatic action. Dr. Bitter finds that there are disadvantages in creolin, as the emulsions employed for injections are opaque, and the preparation of creolin usually on sale appears to be unstable.—*British Medical Journal. Pract. and News.*

#### ARISTOL.

I have drawn the following conclusions after observing its action during the past five months:

1. The drug is free from all objectionable odors.
2. When used over large surfaces you obtain all of its medicinal effects without any toxic effect. It is not absorbed.
3. It possesses stimulating, alterative, and anæsthetic properties; the latter effect less marked than that obtained from iodoform.
4. It does not produce any discoloration of the skin.
5. On account of its dark color you can readily observe how far the powder has been used on a diseased surface.
6. It is not irritating, and its use is not contra-indicated in the treatment of facial eruptions, as chrysarobin and pyrogallie acid.
7. It appears to possess the necessary properties to make it an efficient substitute for iodoform.—*McLaughlin, Va. Med. Monthly.*

McConnell gave the following as the latest and best internal treatment for gonorrhea:

Salol,	3j;
Oleores. cubebæ,	3j;
Copaibæ,	3j;
Aluminis,	3iv;
Pepsinæ sacch.	5ss;
Ol. gaultheriæ,	gtt. x.

M. Ft. capsul No. xx.

Sig: Two every three hours.

This treatment prevents the occurrence of gonorrheal rheumatism. The salol is slightly decomposed by the gastric juice, but is actively decomposed by the intestinal juices into salicylic and carbolic acids, thus acting as an antiseptic in the urinary tract through which it is eliminated.—*Times and Register.*

#### SALOLIZED COLLODION.

In both acute and chronic rheumatism the following will serve as an excellent application to the joints:

Salol,	} āā	parts 4;
Ether,		
Collodion		parts 30. M.



## LEAD POISONING.

Dr. G. L. Walton (Boston Medical and Surgical Journal, October 30, 1890), records a fatal case of lead poisoning in which ataxia was the prominent symptom. The patient was a man, aged fifty-four, whose first manifestation was numbness in the hands. This passed off; then numbness showed itself in the left foot, and persisted gradually spreading up the leg until it reached the back. This numbness and an increasingly staggering gait were the chief things he complained of. There was an uncomfortable sensation in the head, hardly amounting to headache. He had no eye troubles, no pains, no wrist-drop, no loss of power in the limbs, no vertigo, no gastric crises. He could not stand with his feet together and his eyes closed; there was some loss of sensation in the left leg, knee-jerks natural, no ankle clonus, pupils natural, urine natural. The opinion was formed that he was suffering from neuritis of obscure causation. Two months later, the suggestion having been made that the case might be one of arsenical or lead poisoning, examination was directed to these points, and after the administration of iodide of potassium, lead was discovered in his urine, but he still had no blue line and no wrist-drop, and no other manifestation of lead poisoning. The patient was treated with iodide of potassium and continued to excrete the iodide of lead, but he steadily grew worse, and died four months after the lead was first recognized. The only source of lead poisoning that could be found was an old kettle. It was tin-lined, and some water boiled in it for some time was subsequently found to yield traces of lead. Three cases of pseudo-tabs from lead poisoning have been reported by Dr. J. J. Putnam.—*British Medical Journal*.

THE FIRST THERAPEUTIC MEASURE  
IN APOPLEXY.

The following is an extract from a clinical lecture delivered by Dr. Heidenhain (*Berlin Clin. Wochenschr.*). The treatment of apoplexy is apparently so self-evident, and has for decades remained unchanged, that at first it seems preposterous to make any changes or alterations whatever.

Doubtless the experience of H. has often occurred to many physicians in their regular practice. The doctor is called to see a case of extensive apoplexy, and elicits this history. The patient has suffered a slight attack of paralysis; he complains of vertigo and a sensation of weight and immobility in both the upper and lower extremities; there is distortion of the facial muscles, and speech is impaired. The patient has been undressed and placed upon a bed; scarcely has this been done, when a second, more profound attack occurs.

This and similar scenes constantly recur in practice; invariably the profound attack occurs shortly after the patient has been placed upon the bed in the horizontal position. This is done again and again, despite the fact that this position conduces to the cerebral hemorrhage, and defeats the very object which it is desired to accomplish, *i. e.*, prevention of recurrent profuse hemorrhage.

After these experiences, it is absolutely necessary that after the first, the mild attack of cerebral hemorrhage, the patient shall be maintained in the sitting-erect position for a long time; so long, in fact, as the patient's condition will permit. Meanwhile, ice to the head, hot mustard foot-baths, rapidly-acting hydragogue cathartics, and in selected cases leeches, will be the prophylactic measures which in conjunction with position as above described will often prevent a second attack.

Just as such grave error is often committed in the treatment of apoplexy, so are errors of equal seriousness committed, even by physicians, in the treatment of syncope due to cerebral anemia, the reverse condition of the foregoing.

A short time ago H. was called to see a woman who, in consequence of great loss of blood, was in the state of profound syncope. Two doctors were endeavoring to restore her to consciousness, but their efforts were unavailing; and why? The woman lay, or more correctly stating, sat in a semi-recumbent position on a sofa, the head supported on a mass of pillows. H. having ascertained the nature of the trouble, at once removed the pillows, placed the woman's head on the seat of the sofa with her feet elevated on some pillows, when in a few seconds she recovered consciousness. Just as important as it is for the syncope to lie with the head lower than the feet, so important is it for the apoplectic to occupy the sitting position.

In conclusion, H. suggests that as the application of Esmarch's elastic bandage is so effective in the treatment of profound syncope, so the ligation of the extremities might be successful in the treatment of cerebral hemorrhage, the reverse condition.—*Puttsb. Med. Review*.

POINTS IN THE DIAGNOSIS OF GASTRIC  
DISORDERS.

Professor Ewald, says the *British Medical Journal*, in examining the condition of the œsophagus, attaches great importance to the sounds heard with the stethoscope placed on the pit of the stomach. The sounds which accompany and follow the act of swallowing are normally two, *viz.*, the first, *spritz-gerausch* (syringe gurgle); and the second, or *luft-gerausch* (air gurgle). The first has no diagnostic value, and is often absent in cases of hysteria, etc. The second is of great significance, and when present denotes normal contraction of the walls of the œsophagus.

The absence of the sound signifies a stricture or obstruction of the middle or lower third of the esophagus. The best tests for free hydrochloric acid are tropeolin and Gänzberg's reagent phloroglucin vanillin. The routine examination of the contents of the stomach to determine the amount of acid present is carried out as follows: 10 cubic centimeters of stomach contents are taken, and two drops of phenolphthalein added thereto in a saucer. To this a standard one-per-cent salt solution is added drop by drop from a graduated tube till the color changes to red. The percentage of acid present is determined by the amount of salt solution added, the normal acidity being between forty and sixty cubic centimeters of this graduated cube. The absorptive power of the stomach is determined by giving iodide potassium internally. This should be found in the saliva in from fifteen to twenty minutes. To ascertain the motor power of the viscus, a capsule of salol (one gram) is given, and the urine tested with perchloride of iron for salicylates. Another less convenient method is to give a definite quantity of oil by the mouth, and after a given interval remove the contents of the stomach and ascertain the quantity of oil still present.—*American Practitioner*.

#### TRANSMISSIBILITY OF SYPHILIS.

As published in his magnificent *Atlas of Venereal and Skin Diseases*, Prof Morrow's conclusions in reference to the hereditary transmissions of syphilis are:

1. A syphilitic man may beget a syphilitic child, the mother remaining exempt from all visible signs of the disease; the transmissive power of the father is, however, comparatively restricted.

2. A syphilitic woman may bring forth a syphilitic child, the father being perfectly healthy; the transmissive power of the mother is much more potent and pronounced, and of longer duration, than that of the father. When both parents are syphilitic, or the mother alone, and the disease recently acquired, the infection of the fetus is almost inevitable; the more recent the syphilis, the greater the probability of infection, and the graver the manifestation in the offspring.

3. While hereditary transmission is more certain when the parental syphilis is in full activity of manifestation, it may also be effected during period of latency when no active symptoms are present.

4. Both parents may be healthy at the time of procreation, and the mother may contract syphilis during her pregnancy, and infect her child in utero. Contamination of the fetus during pregnancy is not probable if the maternal infection takes place after the seventh month of pregnancy.

#### A REMEDY FOR PALPITATION.

Dr Gingeot (*Revue générale de clinique et de thérapeutique*), suggests as a valuable remedy for palpitation—one that has proved serviceable to him—the application of cold to the precordial region. Attention must be paid to the method of applying cold. The simplest plan of all is to apply a wet sponge over the region of the heart in the morning before dressing. At night, when in bed, the patient or an assistant may put a cold compress over the heart, well covered with dry bandages, to retain moisture and prevent any wetting of the clothing. When this compress is warm, the patient may remove it, and will probably fall asleep. There are objections to the ice-bag, one being the condensation of insensible perspiration upon the surface of the skin. The ether-spray is a simple and convenient method of refrigeration. With proper instruction as to necessary precautions in the use of ether, the patient can apply cold in this way at any hour of the day or night. Palpitation of purely nervous origin seldom fails to be greatly benefited by the application of cold; and a certain success often follows its use in cases of palpitation due to organic disease. Equalizing the heart's action will often prevent an increase in its size. It is also useful in aneurism and passive dilatation.—*N. Y. Med. Journal*.

#### EHRlich's TEST FOR TYPHOID FEVER.

Make two solutions, one consisting of 72 minims hydrochloric acid and 10 grains sulphanic acid in 3 ounces distilled water; the other, a freshly-prepared  $\frac{1}{2}$ -per-cent solution of sodic nitrite in distilled water. To 26 parts of urine from a typhoid-fever patient, and 25 parts solution 1, and one part of solution 2, and the mixture is rendered alkaline by addition of ammonia. A bright orange-red color appears.—*Pract. and News*.

For gonorrhoea Shoemaker advises cleaning the parts with a hot solution of common salt, and the use as an injection of three grains of corrosive sublimate to six ounces of water. Internally he advises the use of terebene in ten-drop doses three times a day, in capsule or on sugar. In a gleet condition the combined use of terebene and belladonna, he thinks, is probably the best treatment. He instanced a case of gleet which had been treated by all the best venereal specialists in this country, which was finally cured by Ricord, of Paris, by the use of belladonna in one-drop doses four times a day, increased to three drops three times a day. Terebene, he says, has not only a most decided action on the gonococcus, but has also a soothing and sedative influence on the mucous membrane of the urethral tract.—*Times and Register*.

## THE RELATION OF LUPUS TO TUBERCULOSIS.

Few diseases of the skin have excited so much interest and attention as lupus vulgaris and the affections cognate to it either in name or nature. At the present moment this interest has been intensified, because the influence of Koch's fluid upon tissues affected with tubercle bacilli was in this disease exhibited most remarkably, and the phenomena could be most easily observed. The effect of Koch's fluid upon it has been regarded as a conclusive proof, from the clinical side, of the bacillary origin of lupus vulgaris, which Koch himself had already demonstrated on the microscopical side, though the bacilli were so few and far between as to leave many observers of large experience still unconvinced. It is not, therefore, to be wondered that Mr. Hutchinson should have taken this subject for a series of post graduate lectures, and should tread again the path which his footsteps have so often traversed, each time trying to do something to smooth the way for other travellers; and it is not without interest for us to learn what effect the new light on the subject has upon the mind of so able and experienced an observer.

The lecture before us shows that Mr. Hutchinson still considers common lupus "as a variety of inflammation induced by any one of many local causes of irritation and inflammation;" the peculiarity of the inflammation being due to the special proclivities of the individual, the parasite being at most a secondary phenomenon; but it is not easy to gather to what extent he ascribes a modifying influence to the presence of the bacilli. That this influence is not a very strong one in his view may be inferred from this observation: "If, indeed, it were asked whether the clinical evidence more favored the belief of the alliance of lupus with tuberculosis or with cancer, I am inclined to think that the reply would have to express hesitation." A little further on he says that parts affected by lupus not infrequently take on cancerous growths, and he quotes Dr. Bayha, of Tübingen, who had met with four cases of such a combination in his own practice, and then says: "I doubt much if many observers could collect from their own observations as many as four cases of lupus in which the patients had subsequently succumbed to any form of internal tuberculosis." These are strong statements to make, and coming from so careful an observer can not fail to attract much attention. It is to be hoped, therefore, that in one of the lectures which are to follow he will give us his own experience as to the number of cases in which he has observed cancer associated with lupus. The number of cases on record is certainly not very great, and there is a remarkable paucity of cases in English literature, most of them having been reported from France or Germany.

With regard to the association of lupus and phthisis, Besnier observed it eight times in thirty-eight cases of lupus, that is, over twenty per cent. No doubt further observations are desirable on this point, but we must look for them among physicians who see much of phthisis, rather than from dermatologists, as when phthisis has set in the lupus becomes a matter of secondary importance. Even as regards the family history, Mr. Hutchinson tells us that statistical proofs fall far short of our general impressions as to the frequency of the connection, but that it is otherwise as regards lupus erythematosus; but on this head he promises us further information. Statistics which are to upset so completely the general opinion held on this subject, will be awaited with interest. It is clear, therefore, that Mr. Hutchinson's views are not yet materially altered by any facts furnished by the effect of Koch's injection, though he admits that further knowledge of it may compel such an alteration. He concludes his lecture by saying that, seeing that a considerable group of maladies are inseparably "associated together in the lupus family, it is probable that one and all should be regarded as forms of chronic infective inflammation deriving their peculiarities from the proclivities of the individual attacked and not from specific elements of contagion."

Whether we agree with Mr. Hutchinson or not, it is instructive to note that there are still two sides to the question, and although the influence of Koch's fluid lends a strong support to the bacillary theory, our experience of it is at present far too limited to found any pathologically strong argument upon it. Already we hear of other diseases, such as leprosy, showing decided reactions after injections, and Koch himself is of opinion that it is not so much a bacillus destroyer as a destroyer of a certain ill-formed tissues in which the bacillus resides, and if other similar tissues, due to the action of other bacilli, break down after injections of the fluid, its diagnostic value is *pro tanto* diminished, and we shall still have to discuss the origin and nature of lupus on the other and older grounds. Many of the mooted points might be cleared up by collective investigation. If, for example, each of the members of the Dermatological Society would carefully inquire into the family history and note the complications of every case of lupus vulgaris and erythematosus which came before them, and contribute them to either the secretaries or any one appointed by the Society, a sufficient number of cases to afford really reliable data would soon be collected. Common as lupus is supposed to be, its frequency is overrated on account of the chronicity of the disease and the way in which patients wander from one hospital to another. Some means, therefore, to prevent the record of a case several times over would have to be adopted. Again, the registrars of consumption hospitals might be applied to to

furnish the cases of phthisis and lupus which have occurred during, say, ten years; and, conversely, they might well inquire whether in any of the relatives of phthisical patients cases of lupus or other form of local disease of supposed tubercular origin existed. Investigations on these and similar lines would settle this much-vexed question in a way that would be found impossible by any individual observer.—*London Lancet. American Practitioner.*

### TREATMENT OF "COLDS" BY SODIUM SALICYLATE.

In a recent number of the *Memphis Medical Journal* the claim is made that salicylate of sodium is as equally efficacious in the treatment of bad colds as it is in tonsillitis. A prescription of half an ounce of salicylate of sodium with half an ounce of syrup of orange peel, and enough mint-water to make four ounces, is recommended in the dose of a dessertspoonful every three or four hours, until the specific action of the salicylate—that is, ringing in the ears—is produced. It is claimed that aching in the brow, the eyes, the nose, together with the sneezing and the nasal discharge, will then cease, and will entirely disappear in a few days, not leaving, as is usually the case, cough from the extension of the inflammation to the bronchial tubes.

### PHENACETIN AS A HYPNOTIC.

It is almost insoluble in water, soluble in alcohol, almost tasteless, may be given like sulfonal, in wafers and compressed tablets, as a powder or with brandy. As an antipyretic and neuralgic it is not as potent as antipyrin and antifebrin, but it is much less a cardiac depressant. In the insomnia of overwork, of nervous irritation, in febrile states, or from headache, it is a hypnotic of great value, in doses of five or ten grains, repeated if necessary. In sleeplessness of intense neuralgia, less than a gramme, repeated two or three times, as needed, is not likely to be effectual, the fact having been first ascertained that there is no intolerance of the drug.—*Boston Medical and Surgical Journal.*

### EARLY LAPAROTOMY FOR CATARRHAL AND ULCERATIVE APPENDICITIS.

Professor Senn concludes as follows:

1. All cases of catarrhal and ulcerative appendicitis should be treated by laparotomy and excision of the appendix, as soon as the lesion can be recognized.
2. Excision of the appendix, in cases of simple uncomplicated appendicitis, is one of the easiest and safest of all intra-abdominal operations.

3. Excision of the appendix in cases of appendicitis, before perforation has occurred, is both a curative and prophylactic measure.

4. The most constant and reliable symptoms indicating the existence of appendicitis, are recurring pains and circumscribed tenderness in the region of the appendix.

5. All operations on the appendix should be done through a straight incision parallel to and directly over the cæcum.

6. The stump after excision of the appendix should be carefully disinfected, iodoformized, and covered with peritoneum by suturing the serous surface of the cæcum on each side over it with a number of Lembert stitches.

7. The abdominal incision should be closed by two rows of sutures, the first embracing the peritoneum, and the second the remaining structures of the margins of the wound.

8. Drainage in such cases is unnecessary, and should be dispensed with.—*Jour. Am. Med. Assn.*

### ANTIPYRIN IN CHOREA.

In a paper recently read before the Société Médicales des Hôpitaux de Paris (*Bull. et Mém.* December 25, 1890), Dr. Charles Legroux states the results of the treatment of chorea by antipyrin in sixty cases observed throughout their course. He found that antipyrin had a beneficial effect in two-thirds of the cases, rapidly diminishing the intensity of the disease, and shortening its duration; recurrence, however, took place in three-fifths of the cases. In the cases in which the drug failed this was found to be due in some instances to intolerance (vomiting, diarrhoea, etc.), or to cutaneous eruptions; in a few cases the drug appeared to have no effect on the disease. He found it necessary to give large doses, and to reach the maximum dose in a short time. Between the age of six and fifteen doses as high as three to six grammes (about 5 iss to ʒiij) a day were well tolerated for several weeks. Serious symptoms of poisoning were never observed, and in some cases in which an eruption or vomiting was at first noticed, when the use of the drug was resumed after a short interval these symptoms did not recur. None of the cases treated had any rheumatic symptoms, but none were of a serious character.—*Suppl. British Med. Journal.*

ointment for COMEDONES.—The *Canadian Pharmaceutical Journal* quotes the following prescription, said to be used by Unna in the treatment of comedones:

R.—Solution of hydrogen peroxide	} of each 2 ounces.
Vaseline	
Lanolin . . . . .	1 ounce,
Acetic acid . . . . .	1 drachm,
Mix and perfume.	

## TREATMENT OF CERTAIN SPRAINS.

In an article in the *University Medical Magazine*, Dr. D. Hayes Agnew calls attention to certain cases of persistent lameness which have been ascribed to sprains of the ankle, and treated as such with but temporary benefit. The lameness returns on the patient's resuming exercise.

In these cases the trouble is not in the ankle joint, but in the sheath of the tendon of the peroneus longus muscle. This will be easily evidenced by pressure along the course of the tendon, between the external malleolus and the base of the metatarsal bone of the little toe. There is little, if any swelling; pain will also be experienced on forcibly abducting the foot. The differentiation from ankle sprain is comparatively easy, for here there is diffuse swelling about the joint, especially in front, and unusually severe pain on flexing and extending the foot. When the tendon and its synovial membrane are involved, a Dupuytren splint should be applied on the outer side, fixing the ankle and holding the foot in an abducted position. The tendon is thus relaxed and pressure is taken from its canal. With rest and anodyne applications the inflammatory trouble will subside in a week or ten days. The patient must not now be allowed to walk around in an ordinary shoe. A number of plies of leather are to be applied on the outer side of the sole of the shoe, gradually thinning off toward the inner side of the foot, and relieving the tendon from pressure. Such a shoe should be worn for some time, and only restored to its original form by gradually removing one layer of leather at a time from the sole.—*International Journal of Surgery*.

## CHRONIC PHARYNGITIS.

The following is said to be a good application :

R Ergotini.....gr. xv.

Tinct. iodini.....3 i.

Glycerini.....3 i.

M. S.: Apply thrice daily with a camel's hair pencil.—*St. Louis Med. & Surg. & Journal*.

## SALOL IN ACUTE TONSILITIS.

In a recent article on this subject, Dr. Jonathan Wright quotes Gouguenheim's conclusions on this subject as the most satisfactory summary. They are as follows: 1°. Salol acts beneficially in acute anginas of whatever cause. 2°. It quiets the pain and dysphagia with the greatest rapidity. 3°. In quieting the pain it may shorten the duration of quinsy. 4°. It lowers the temperature. 5°. In nearly all cases it diminishes the duration of the angina. 6°. In order to attain those results, the dose should not be less than four grammes (sixty grains) daily.—*St. Louis Med. and Surg. & Journal*.

## THE CANADA MEDICAL RECORD,

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## EDITORS:

A. LAPHORN SMITH, B.A., M.D., M.R.C.S., Eng., F.O.S., London

F. WAYLAND CAMPBELL, M.A., M.D., L.R.C.P., London.

## ASSISTANT EDITOR

ROLLO CAMPBELL, C.M., M.D.

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MONTREAL, APRIL, 1891.

## CONVOCAION OF BISHOP'S COLLEGE.

The 20th annual convocation for the conferring of degrees in medicine was held on Tuesday 31st ult., in the Synod Hall, and was one of the most largely attended in the history of the College, most of the leading ladies of the city being present. The Chancellor Mr. Henneker, read an excellent address which was listened to with marked interest.

The valedictorian for the faculty was Dr. McConnell, who touched upon the most important scientific discoveries of the day, and concluded by giving the graduates some excellent advice, among other things telling them that they would do well to spend the next two or three years in either going to Europe, or else in perfecting themselves in the use of the microscope. He also pointed out the value of a knowledge of French and German. Dr. Woods on behalf of the graduates read a bright and cheering address in which he thanked the professors for all the trouble they had taken during their four years study. He also referred in feeling terms to the many acts of kindness shown them by the Faculty, and especially by the Dean who was beloved by all. When Miss Ritchie went up for her diploma there was

an outburst of enthusiasm from the whole audience, in which her fellow students and graduates joined most heartily. A striking feature was the reception by Mr. Edwards, a colored student from Jamaica, of the Wood gold medal for general excellence, and the Nelson gold medal for surgery. This is the second time a colored student has carried off these honors. The high standing of Miss Ritchie and Mr. Edwards in the examinations prove that intellect and industry are quite independent of either sex or color.

### MATERNITY HOSPITALS.

A recent outbreak of diphtheria of the genital tract among four recently delivered women in the maternity department of one of our hospitals, which has completely put a stop to all operations there for the present, shows the urgent necessity for removing the midwifery department to another building no matter what immediate sacrifices may have to be made. Experience has proved over and over again that a maternity should never be carried on in a general hospital; but besides the sanitary reasons there is also the ethical one, that unmarried women have a reasonable objection to be operated on in a hospital which has the name of being a lying-in-one. What we would suggest is that the corporation of this hospital erect a one, or at most two storied brick pavilion on the end of their lot, of such a character as to be good for only ten or fifteen years, at the end of which time it might be pulled down to make room for a more imposing structure. The ideal maternity should not have a sewer pipe nor a drain pipe of any kind within its walls; all closets and soil pipes should be in a separate tower connected with the main building by a passage way.

### APOLLINARIS WATER.

The introduction of this water into Canada is comparatively of recent date, and its consumption is now very large. Most people who can afford to use it, do so. Teto-

tallers drink it plain, and find themselves better for it. Others employ it with wine or spirit and believe it makes an excellent diluent. To encourage its use as a plain, simple beverage, medical men are fond of recommending it. To convalescents it is a grateful drink—relieving thirst and leaving behind it a pleasant taste. Its cost, though much reduced within the past few years, still keeps it within the range of luxuries. It is, however, possible to reduce its price still lower by remitting the duty upon it—as well as upon all *natural* mineral waters—and such an effort is now being made. We hope it will be successful. We have not any Canadian water, so far as we know, that can compete with it, so then nothing can be urged, so far as protection is concerned, for the continuance of a comparatively high duty. In the United States we believe it is admitted duty free, this concession being made as the result of a memorial to the House of Representatives and Senate of the United States. This memorial was signed by hundreds of the leading medical men, among them being such men as Drs. Fordyce Barker, W. Gaillard Thomas and A. McLean Hamilton, of New York; Dr. Wier Mitchell, and others of equal eminence in Philadelphia. A somewhat similar memorial is being prepared for presentation to the Canadian Government, which we hope will be successful.

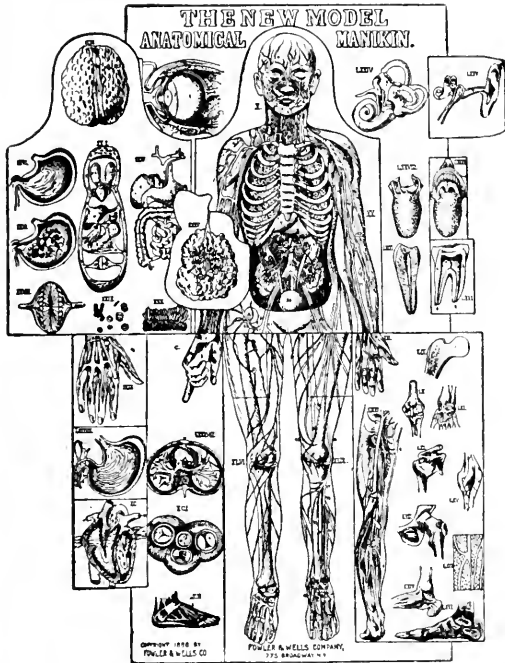
### IODIDE OF POTASSIUM IN THE TREATMENT OF URTICARIA.

Stern has successfully treated five cases of chronic urticaria by the administration of iodide of potassium, four of the cases having been rebellious to all the measures usually employed in this disease. The fifth case was one of acute urticaria of a few day's duration. None of the patients were syphilitic and all were rapidly cured. In one case which had lasted for four months the intolerable itching disappeared on the second day of treatment, and a complete cure was obtained after two and a half drachms of the iodide had been administered. In two other cases, one of two years' and the other of six years' duration, the effect of the iodide was equally good, cure following the administration of six and eight drachms respectively.—*London Medical Recorder*, November 20, 1890.

## BOOK NOTICES.

THE NEW ANATOMICAL MANIKIN. Fowler and Wells Co., 775 Broadway, New York.

The accompanying engraving gives only a very inadequate idea of this valuable work. When folded up the manikin appears to be an ordinary atlas, measuring about eighteen inches square, but when open it measures thirty-six inches in height, and is arranged so as to be hung on the wall. In this comparatively small space the publishers have managed with great skill to include no less than one hundred and two beautifully colored lithographic drawings, many of them life-sized, of every portion of the human body. This is accomplished by constructing the manikin in successive layers which open on hinges showing just what the dissector would see on removing successive layers of tissue by dissection. Thus at first we have a half life size view of the body with only the skin removed; there are the blue colored veins, the red colored arteries and the nerves tinted yellow. On one side a layer of muscles has been removed so as



to show the next layer and also the distribution of the arteries, while the bones and joints are outlined underneath. Every bone and muscle, nerve and artery and vein has a number on it, which by referring to a small index at once tells the name. By opening up the first sheet we then come to a posterior view of the body, every muscle being clearly exposed, in some cases there being three engravings of the same region so as to show the successive layers of muscle removed. Then we come to sections of the bones and joints, there being a beautiful engraving of each, showing the ligaments, the drawings of the ankle joints and sections of the other joints in the foot being especially good. There is also a microscopic section of bone. Nothing is omitted, even the lymphatic glands being faithfully delineated. Then comes the anterior view of the blood-vessels of the face and neck, and the thorax, showing lungs and

heart between the ribs; while lower down on the same plane is seen the stomach and intestines, the omentum having been removed. Engraving XXIV. gives a very fine view of the stomach, small and large intestines, and the liver. XXIX shows a drop of blood, magnified, and XXX represents a section of villi of small intestine. Three drawings exhibit the appearance of the interior of the normal stomach and the changes which take place in it from alcohol drinking. Another part of drawings shows the normal and the brain congested by liquor. XLII. is a beautiful drawing of the brain, spinal nerves and sympathetic system. LI. shows in more detail the sympathetic and pneumogastric. All around the main charts are smaller ones about five inches square showing the special organs: anterior view of eye; anterior view of ducts and glands of eye; anterior view of eyeball, lids being removed; eye ball with nerves and muscles as seen from above; transverse vertical section of eye showing lenses, coatings and muscles; external ear; bony labyrinth; internal ear; tongue and throat; cancer of tongue; section of teeth; section of skin; larynx, vocal cords, and the internal and external muscles. No. LXI. shows the cecum and lower portion of ascending colon, laid open, showing the termination of ileum, appendix vermiformis, ileo cecal valve and the opening of the appendix vermiformis. XCIII., XCIV. and XCV. are beautiful, full-sized pictures of the kidneys, normal and in a state of degeneration. Space does not permit us to go into the many other drawings in detail, but what we have said will enable our readers to judge of the great value of such an atlas to hang on the wall of their consulting rooms, where they can only be looking at it themselves but where they can constantly turn to it in order to explain to patients the nature and location of their disease. This is no longer an age of medical mystery; patients will not be satisfied with platitudes, they must know exactly what is the matter and where the trouble is. In some respects this is to be deplored, for it makes the lot of the practitioners a much harder one than it used to be, when no explanations were required. This atlas seems have been prepared for the express purpose of making this task a lighter one, for the practitioner only has to point to the atlas to make even the most stupid patient understand where his trouble is, and thus make him far more satisfactory in carrying out our directions. We venture to say that this atlas would pay for itself in a very few months by the increased number of visits which an interested patient will make to the consulting room.

**PATHOLOGY AND THERAPEUTICS OF THE DISEASES OF WOMEN.** From lectures given to physicians during the vacation courses by Dr. August Martin, Instructor in Gynecology in the University of Berlin. With 210 woodcuts. Translated from the second revised and enlarged edition, with the approval of the author, with notes and appendix, by Dr. Ernest W. Cushing. Second American edition. Published by E. W. Cushing, M. D., 168 Newbury street, Boston, Mass.

To Dr. Ernest W. Cushing, the talented editor of the *Annals of Gynecology* of Boston, and a Gynecologist of the highest order, those members of the profession who are interested in operative gynecology are under a heavy debt of gratitude for his laborious task of translating August Martin's book. That his labor has been appreciated is evident



from its having within two years of its appearance run through two editions. Gratifying as this must be to him, we think that several editions more would soon be called for were the existence of the translation more widely known. Any one who has seen August Martin operate will agree with us that as an operator he stands unique, while it is equally evident that he has contributed largely to form the character of modern operative gynecology in America, through his pupils. The translator aptly puts it in his preface when he says: "In determining to translate the work of Dr. Martin into English, I was influenced not only by a desire to show my appreciation of the many favors and courtesies which I received at his hands during a somewhat prolonged sojourn in 1885, but more particularly because the pathological theories advanced and the surgical treatment recommended, differed so materially from what I was familiar with in current theory and practice in this country."

On entering on a very active practice in a large hospital in 1886, Dr. Cushing was able to demonstrate the great safety and convenience of the treatment recommended in Dr. Martin's work. At that time these views were innovations, but since then most of them have been generally adopted. Such for instance is the regular use of the dorsal position; the constant employment of sublimated irrigation in operating; the free use of the sharp curette, followed by flushing of the uterine cavity in endometritis; the abolition of wire and shot in all operations; the accurate views as to endometritis, and the disposition to regard the conjection and heaviness of the uterus as secondary to the endometritis, instead of *vice versa* as was then commonly believed in the country. In addition to Dr. Martin's work proper, this translation contains an introductory chapter on the advances of gynecology in Germany, during the last two years so that it is in every respect up to date. Moreover Dr. Cushing's micro-photographs, which elicited the greatest admiration at the Congress in Washington, are inserted in the work opposite the appropriate subjects, as also are many other photo-engravings which appeared in the *Annals of Gynecology*. It is interesting to note that it has already been translated into French, Italian, Russian and Spanish as well as English. In conclusion we would urge all those who are preparing, or who are about to prepare to undertake gynecological operations to procure this work at once, the study, of which will amply repay them for the slight expenditure of time and money. To any who can we would say, "see Martin operate," but to all who cannot see him operate we would say, "read his book." The writer of this notice is under lifelong obligations to Dr. Martin for his kindness while a student of his in 1887, and has done what little he could to introduce his methods into this country; and he will be pleased indeed if by calling the attention of the readers, of *THE RECORD* to the merits of Dr. Martin's work, he may contribute a little more to give his master the merit he deserves. Of the translation it is hardly necessary to add that the original has lost nothing and gained not a little at the translator's hands.

### PERSONAL.

Dr. O'Connor has taken the house formerly occupied by Dr. Laphorn Smith, while the houses formerly occupied by Drs. Blackader and Perry have been converted into shops.

Dr. Laphorn Smith, who removed his residence last spring to 248 Bishop street, retaining his office at 68 Beaver Hall, will in future have his office at his residence, 248 Bishop street, above St. Catherine street.

Dr. McConnell, who has been located for the past ten years in Bleury street, will remove on the first of May, to the corner of Union avenue and Berthalet street, just opposite to Dr. Major's. This is one of the best locations in the city, and as Dr. McConnell is now one of the "older" practitioners, we think the move will be a good one.

Dr. Geo. T. Ross will also leave Beaver Hall on the first of May, having rented the fine house being built by Dr. Dugdale, next to his own at the corner of Dorchester and Mountain streets. This latter locality is fast taking the place of Beaver Hall, there being at present grouped within a hundred yards of this corner no less than fourteen physicians, among whom are Drs. J. C. Cameron, J. Stewart, Stirling, Dugdale, G. T. Ross, Blackader, Allan, Drummond and Lockhurst.

We have much pleasure in welcoming to the ranks of the profession, Miss Grace Ritchie, (C. M., M. D. Bishop's College, 1891). By her assiduity in the classes and especially in her hospital and dispensary work, she has completely refuted the argument that women are unable to compete with men in intellectual work. We hope that ere long both Miss Ritchie and Miss Mitchell may be admitted to the meetings of the Medico-Chirurgical Society. As one of the leading members recently remarked, "the more we have of such *workers* in it the better." We understand that Miss Ritchie will proceed to London to take an English diploma before settling down to practice.

### NEWS ITEMS.

W. R. Warner & Co. are evidently determined to keep in the van of therapeutic remedies. "Antalgic Saline" appeals to us to-day for recognition as a remedy for the relief of "headache," also for influenza and neuralgia, and as an antidote of "la grippe" they issue the "Pil. Chalybeate Compound."

Composition carb. protoxide of iron, grs., 2½.

Ext. nuc. vom., - - - gr., ½.

Sig.: One pill every four hours and increase to 2 pills three times a day.

Antalgic Saline, one dessert spoonful every four or five hours till relieved for headache. The same mode of administration precedes that of the chalybeate pills for "la grippe."—*Weekly Medical Review*.

CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS.—The meetings of the Congress of American Physicians and Surgeons will be held in Washington from 3 to 6 p.m., September 22nd, 23rd, 24th, and 25th, 1891. William Pepper, chairman of the Executive Committee.



# The Canada Medical Record

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MONTREAL, MAY, 1891.

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## Original Communications.

### VALEDICTORY ADDRESS,

SESSION 1890-91,

*University of Bishop's College, Faculty of Medicine, delivered at the Convocation held in Synod Hall, March 31st, 1891.*

(By J. Bradford McConnell, M. D., Professor of Pathology and Lecturer on Physical Diagnosis.)

*Mr. Chancellor, Ladies and Gentlemen.*

LADY AND GENTLEMEN GRADUATES,—

This day marks the culminating point of your educational career. The process of mental training and the acquisition of knowledge, which during a score or more years, in school, academy and university, has been gradually developing your minds, and storing the memory with innumerable facts, has so far progressed that you have become entitled to be invested with the degree of Master in Surgery and Doctor of Medicine, which has just been conferred upon you by the Chancellor of this University. To be the possessor of such a credential is evidence that satisfactory proof has been given of a good general education in literature, languages, history, science, philosophy, etc., that you have attended a four years' course in medicine, and successfully mastered the subjects of its varied curri-

culum which includes besides the regular medical and surgical didactic lectures, practical training in chemistry, microscopic technique and physical diagnosis, and above all that in the different hospitals of the city you have taken advantage of the ample opportunities afforded here for studying diseases at the bedside, and observing the effects of the remedies applied and the methods of operative treatment, and finally by written and oral examination, proof has been given of having attained to a proficiency in all the branches, satisfactory to your examiners, as well as to the assessors appointed by the Board of the Provincial College of Physicians and Surgeons.

Armed with this well-earned parchment, a token of the confidence replaced in you by your Alma Mater, you are now prepared to enter upon the active work of the profession of your choice and become enrolled into the ranks of the vast army of physicians and surgeons whose labor consists in alleviating the physical sufferings of humanity,—pointing out the dangers of pernicious habits, unhealthy pursuits, and unsanitary surroundings and generally indicating to their fellow beings, the course to follow in order to attain unto that perfect state of physical and mental health through the possession of which only can men experience true happiness no matter what their

success may be in their business or professional careers.

The graduating class which I address to-day is unique in this collegiate centre, inasmuch that for the first time in the history of this college a lady member graces its roll. In view of the fact that women have in late years proved their ability to occupy positions successfully in nearly every field of labor, where hitherto men had a monopoly, and accomplish results, whether in mercantile life, literature, art, or on the platform, equal to any proceeding from male intellects: it was not to be surprised that being more especially adapted to the work of the physician and naturally endowed with the elements of character essential to his success, they would ere long seek admission to the halls of medicine, but few portals, however, opened to their rings for admission: special institutions accordingly were established in different centres: and throughout the neighbouring Republic, as well as in the Dominion, as a result, lady practitioners have demonstrated their ability to cope successfully with the demands made upon them in several important departments of medicine.

This Faculty at the earnest solicitation of a number of ladies, decided about a year ago to test co-education in medicine, and some half a dozen ladies were enrolled on the register. The difficulties which were supposed to be inseparable in mixed classes have in the light of this session's experience, proved themselves to be phantoms, conjured in the undeveloped minds of those pessimists whose want of faith in the innate and growing tendency to uprightness in humanity—which we believe to be a law of evolution on this plane just as unceasing progression characterizes all living processes in other planes—tends to retard rather than hasten the coming of that millennial period for which all the moral forces in the world and in higher spheres are laboring; when even the thought of evil will have no abiding place. In a word, the utmost harmony has prevailed in these mixed

classes, the presence of the ladies has caused no confusion or disconcerting dilemmas, and has not in the least interfered with the manifestation of the natural buoyancy and exuberance of spirits supposed to be characteristic of the medical student, and in no instance has any but the most gentlemanly conduct been displayed towards them by their fellow-students, and the zeal displayed by the ladies in their studies has had its influence in stimulating to greater efforts the other members of the classes, who, from previous reputation were led to regard them as no mean rivals for the position of honor. The results of this session which show that our first lady graduate, Miss Grace Ritchie, has passed a brilliant examination, taking the second highest marks is another instance in proof of the claim, questioned by some, that women are as qualified mentally as men, for the highest class of intellectual pursuits.

It is to be regretted that owing to a technicality requiring at least two sessions attendance in order to compete, she cannot receive the Chancellor's prize to which she is entitled by merit, but we know she will gracefully bow to the unfortunate prescription which render it impossible for her to receive the tangible token of the proud position, which she has honorably won.

That the Medical Faculty of Bishop's College acted in keeping with the times, in responding to this demand from the ladies, few thoughtful people will deny. Co-education in all departments of medical study is now carried on in Paris, Geneva, Zurich, Berne and Basle and in the Universities of Belgium, Spain and Italy, here they work together side by side with only good results and many are even elected as internes in the hospitals, and we learn from a recent letter of Dr. Osler, physician-in-chief of Johns Hopkins Hospital, that their Medical School which will aspire to take the lead on this continent, will admit women on the same terms as men. Cardinal Gibbons says that co-education of the male

and female sex will effect a beneficial influence on the male, and that the prejudice which allows women to enter the profession of nursing and excludes them from the profession of medicine, cannot be too strongly censured, and its existence can only be explained by the force of habit. We find it is only a modern revival of what occurred in the middle ages when the obstetric art was almost entirely in the hands of women, and in the Universities of Salerno and Bologna in Italy, some eight hundred years ago, not only where women admitted as students in medicine, but they also held professorships.

You enter upon your career as practitioners at a time when almost revolutions are occurring in medical science; the last decade has probably witnessed greater discoveries and more solid advance in the development of new facts than any similar period in the history of medicine. The number of competent workers in every department is much larger than at any previous time, doubtless owing to the increasing numbers of those who perfect themselves at the great medical centres in Europe and elsewhere, in their special line of study, becoming imbued with the spirit of research from contact with the recognized leaders of medical thought. In consequence scarcely a week passes without the heralding of some new discovery, method or remedial agent.

Some are never heard of after their first publication, others are the fashion for a brief period and then discarded, while many become permanent and invaluable additions to the great store house of accumulated facts generally accepted. In no department are such advancements being made as in those where the modern perfected microscope is the implement used to clear away the brush which until a recent date has existed in its primeval density in several important branches of medical science.

Prominent among these are the developments being made as to the part taken by

microscopic organisms in the production of disease. The present army of explorers in this field have worked chiefly in the pathway of the great pioneers Ehrenberg, Schwann, Cohn, Henle, Pasteur, Koch, Lister and others. Pasteur's great work first flashes on the world, demonstrating that what up to his discoveries were regarded as ferments in the process of fermentations were simply the food of minute organisms, and alcohol, acetic, lactic, butyric acids, &c., the result of the digestion or chemical transformation by their growth and multiplication. The diseases of wine and beer he found also to be other micro-organisms and pointed out the remedy. Soon Pebrine, a disease of the silkworm was made to own to a similar origin and again the remedy suggested and the ruined silk industry of France restored.

Professor Koch and Pasteur's demonstrations in regard to the bacillus found in anthrax, discovered by Davaine in 1850, a disease which was decimating the herds and flocks of Europe, then followed.

A new era about this time dawned in regard to the treatment of infectious diseases. Pasteur by rendering less virulent the germs of fowl cholera and anthrax and by inoculating healthy animals with this attenuated virus, produced a mild form of the disease, which protected from a subsequent attack, just as vaccination protects from smallpox or the attack of an infectious disease usually protects from subsequent ones.

Pasteur's successful application of this principle in the treatment of hydrophobia is his last important accomplishment. Koch's discovery of the microbe of cholera and tuberculosis followed shortly after, and some one or another has claimed to have discovered the parasite of nearly the whole list of infectious diseases, the latest being the alleged discovery of the microbe of La grippe, but many of these have still to be verified.

All these organisms, which belong to the

vegetable kingdom, can be destroyed outside the host, by antiseptic remedies, but hitherto none of the pathogenic bacteria have been made to succumb to their action while in the system. In ague, on the other hand, where the parasite is a minute animal plasmodium, quinine is a specific. The present discovery of Professor Koch of a remedy for tuberculosis, the most deadly foe of the human race, has agitated civilization more thoroughly than any event for some time, and the din of the excitement its announcement caused still reverberates throughout civilization. The expectations which it aroused through the great reputation of its discoverer have not and will not be fully realized, but that it will accomplish all that he claimed, for it has been proved by the results already obtained by the most competent experimenters and as our knowledge of the action of the remedy becomes perfected and only the cases adapted to its application treated we have no doubt but that very satisfactory results will be obtained.

Another feature of the present period is the relaxing of the marked conservatism which reigns in the profession and the recognition of therapeutic agents hitherto employed mostly by irregulars and ignorant empirics, posing them as panaceas before a gullible public; and the placing of them in their true positions as remedies. Among these may be mentioned electricity, which has a wide range of application hydrotherapy and massage, and lately what is called suggestive therapeutics or the application of hypnotism to the treatment of functional and nervous diseases is being prominently brought forward by such men as Chareot of Paris, and Bernheim and Liebeault of Lyons, and R. Von Kraft Ebing of Graz, Austria, and many others. A great field opens up here for investigation, and one that gives promise of interesting and useful developments.

It is a revival of what is known under the name of Braidism, magnetic healing,

electrobiology, &c. In the hypnotised condition, the subject is more or less completely controlled by the will of the operator and susceptible to any suggestion made by him, so that by a word anæsthesia may be produced, operations are performed without pain being realized, and in like manner they are made to feel pain or any sensation suggested, and diseased conditions are made to disappear with a thought, and even normal physiological and chemical processes are controlled by this power.

The influence of the mind on the conditions of the body must never be lost sight of in treating your patients. Their faith in your ability to heal them, is a more potent factor often than the action of the remedy you prescribe. If it were not so, and if there did not exist a *vis medicatrix nature*, decimal dilutions, faith cure, Christian science, and such like methods would have but few votaries.

Great psychological truths doubtless underlie all these phenomena and manifestations of mental therapeutics, which will in the near future be unfolded by the many eminent workers in this field of labor.

A larger proportion of functional and apparent organic affections which appear for treatment are neurotic; the result of abnormal influences brought to bear on the mind and brain; should you be led into treating the effect and not the seat of origin, disappointment will follow, and you may experience the humiliation of hearing of your patients being cured by some *quack nostrum* or travelling charlatan through the influence on his mind chiefly of their glowing advertisements.

Graduating classes usually receive at the hands of the Valedictorian parting words of advice. I will be brief. It is presumed that your aim is high. This is a prime requisite in order to attain eminence; then earnest persevering work is needed, without this but little can be accomplished, it is the key which unlocks the treasures of wealth, fame and true greatness. In your

early years of practice you will have ample time at your disposal, do not let the opportunity thus afforded for study and experiment pass by unimproved. Provide yourself with a good microscope and endeavor to become familiar with the various morbid conditions of the body, as revealed by it, which will aid you greatly in diagnosis. You should during this period also perfect yourselves in the application of the various chemical tests employed in clinical diagnosis and in the use of the various instruments and medical appliances whose value depends on experience in their use. Besides a good selection of standard works, several representative medical journals should be subscribed for and regularly read.

The habit of recording the progress of your cases should be cultivated. If you have not already become familiar with the French and German languages, this acquirement is recommended; in the latter especially appears much of the best original medical literature, and a visit to those great centres of thought will be comparatively barren in results if the language is not understood.

To those of you having the opportunity a few months spent at the hospitals in London or the great medical centres on the European continent previous to beginning practice will be of great advantage.

In your intercourse with your patients you will find it almost as necessary to study human nature as exemplified in their cases, as their maladies, and your success will often depend as much upon the tact displayed in maintaining a frame of mind favorable to recovery as upon a skilful application of medical treatment proper. Cultivate a cheerful temperament in your association with the afflicted, so that your presence in the sick room will be as welcome as the sunshine and flowers of spring, and magnetic rays of healing will from your beneficent influence reanimate the languid sufferer. Patience and forbearance you must continually exercise,

Seek to be friendly with your *confreres* and shun any dishonorable means towards gaining an advantage over them, or supplanting those who have been in the field before you; be satisfied only with success which results from true merit, and although ample and detailed guidance is laid down in the published schemes of medical etiquette for the regulation of conduct between members of the profession, that great maxim which has come down to us through the ages, "do unto others as you would that they should do unto you," if acted upon will prove an unerring guide.

While it is your duty to be a thoroughly informed physician and abreast of the times in regard to every agent which will assuage the suffering of the afflicted, you should be found supporting all those modern reforms which aim at the prevention of disease and the amelioration of the social, moral, and physical conditions of the race; what sorrow and suffering are caused by intemperance, immorality, errors of alimentation and dress, improper hygienic surroundings and other transgressions of nature's laws, the result of ignorance? And our lady graduates whether they devote themselves entirely to professional duties or become absorbed in some matrimonial alliance, what an influence for good they can exert through a diffusion of the knowledge they possess in the direction of improving the physical condition of their own sex? The vigour of a nation is dependent on the physical perfection of its women; disseminate widely and constantly a knowledge of the pernicious influence of insufficient open air exercise, too long hours in unventilated school rooms, exhausting the vital forces by over-mental work at a period of girlhood when they are needed mostly for physical development; the prejudicial effects of the high heel, and corset, and in combating in many other ways the various influences which have been at work deteriorating and stunting the physical development of the female sex.

I must now say farewell on behalf of the Faculty, and would ask you not to forget that as it has been our delight to guide and instruct you in your college labors, so will our interest not cease in your welfare although your voices resound in our halls no more; and may the sunshine of this glorious spring day which smiles on the inauguration of your birth into the medical arena typify the radiant success which we trust will characterise your future careers.

## Progress of Science.

### THE OPERATIVE TREATMENT OF PERITYPHLITIS.

By Professor Sonnenburg, Berlin.

The author states that every case of perityphlitis should not be subjected to operation. If we are able to recognise the circumscribed purulent form of perityphlitis, it should be treated according to the same principles as suppuration, in other parts of the body. Although absorption sometimes takes place in these cases, an expectant plan of treatment is attended with great dangers. Perityphlitis should be differentiated from typhlitis. In the latter there is an inflammation of the cæcum and vermiform appendix, or of the latter alone, and this process may be unattended with exudation. Usually, however, exudation is present in the surrounding tissues, and this condition is best expressed by the terms perityphlitis or paratyphlitis, the latter being especially applicable to exudations at the posterior surface of the cæcum, which are, therefore, extra-peritoneal. Frequently a typhlitis is combined with a perityphlitis. In simple typhlitis there is much redness of the serous covering, and the mucous membrane is the seat of inflammatory swelling; the same condition is found in the vermiform process and has been termed appendicitis. In true perityphlitis there is always an exudation, either sero-fibrinous, or purulent fibrinous, or simply purulent. The diffusion of the process varies greatly; considerable exudations extend beyond the ileo-cæcal region.

The sero-fibrinous exudations are quite resistant, and sometimes feel as hard as a board. When situated around the cæcum they are usually completely absorbed. In a few cases, indurated deposits are left behind, and frequently adhesions are between loops of intestines which had been imbedded in the exudation. These exudations are encapsulated, and usually result from faecal obstruction; they are not apt

to be followed by general peritonitis. In persons suffering from tuberculosis or other diseases of the intestines they may become purulent, although suppurative changes in exudations are much more frequently caused by inflammation of the vermiform appendix. Aside from catarrhal inflammation of the latter, enteroliths are frequent causes of perityphlitis. In these cases we always find pus, due to gangrene from stasis, perforation from impacted foreign bodies, or tuberculous ulcers. The non-purulent exudations present in perityphlitis of the cæcum, which are due to faecal obstruction, and can be absorbed, do not occur in the appendix. Purulent perityphlitis exudations are not reabsorbed, or at least only partially, or their fluid portions; the pus cells remain and form an indurated mass. Paratyphlitic deposits always result from perforation, are always sero-purulent, and incapable of being absorbed.

It is a matter of consideration whether we can always recognize the presence of purulent exudations around the vermiform appendix, and treat them by operative measures. In the sero-fibrinous exudations around the cæcum an operation is excluded, because they are absorbed. The symptoms of perityphlitis cannot be sharply differentiated; the larger the exudation at the beginning, the less likelihood is there of the presence of a purulent exudation around the appendix, and the greater the probability of an infiltration around the cæcum. The small exudations, which are, perhaps, circumscribed at the beginning, and situated usually at the classical place above Poupart's ligament, almost always originate from the appendix. These may change and increase rapidly within a short time. Other exudations remain small for a long time, and may not be made out by palpation, on account of tympanites. The extent of the exudation is therefore of importance in the diagnosis of a sero-fibrinous or purulent exudation. Moreover, the greater the violence of the initial symptoms, the more warranted are we in concluding that we have to deal with an exudation or phlegmonous process around the appendix, inasmuch as inflammation of the latter is usually produced by enteroliths, and perforation or gangrene of the appendix may be regarded as the starting point of the perityphlitis. As a rule, in the cases observed by the author, violent colicky pains in the umbilical region were developed suddenly at night, or after a movement, and succeeded by vomiting, diarrhoea or constipation. After a few hours, severe pain was experienced in the ileo-cæcal region and the urine was found to contain indican. In perforation there is usually present a small resistant place, dull on percussion, and an exudation can be made out by percussion above Poupart's ligament, which is very sensitive to pressure. These symptoms occur in persons who have previously enjoyed good health, and have not suffered from

digestive troubles. At the beginning, meteorism is frequently absent. The fever varies considerably, in some cases it rises at once to  $40^{\circ}$  C. ( $104^{\circ}$  F.), in others in which pus was found by operation, only slight elevations of temperature were observed. In these cases, therefore, even slight elevations of temperatures up to  $38^{\circ}$  C., are pathognomonic of pus formation.

The class of cases where the perforation of the appendix is followed by a general peritonitis, and which is less frequent than that where an exudation is formed, is not discussed by the author, but he refers only to inflammations of the appendix which result in a genuine perityphlitis. The latter disease does not always present the characteristic appearances which have been described. The position of the appendix may vary greatly, and in consequence of this, the clinical appearances may be completely changed. The abscess or the exudation may be situated superficially or deeply, or in the pelvis; if, however, the appendix lies far backward, these conditions can only be determined with difficulty and frequently only at the autopsy.

In cases of strangulation of the appendix, the symptoms may be very violent and resemble a perforation, and then disappear in a few days. If a diagnosis of purulent perityphlitis has been made, the pus should be evacuated as early as possible. Formerly, our operative methods were inadequate, and the diagnosis uncertain. A spontaneous cure is not to be regarded as desirable in these cases, on account of the danger of perforation into the bladder, intestine and abdominal cavity. The evacuation of the pus into the intestines is never complete, since valvular openings are formed, from which it is imperfectly discharged; the consequences being sepsis and death. In the simplest and most favorable cases for operation, where the exudation is superficial and gives distinct resistance, and only moderate meteorism exists, the abscess can be felt through the abdominal wall, and fluctuation can be made out. In puncturing through the abdominal wall the needle does not always penetrate the abscess, and the neighboring parts may be injured. If fluctuation is present an incision should be made; the protrusion of the peritoneum in the vicinity of the abscess will show its position. We then puncture again and open the abscess.

A different procedure, should be followed in cases where a small indistinct exudation exists, and where on the following day the symptoms may be greatly relieved, the resistance has become more indistinct, and the entire process seems to have retrograded. The pains are moderate, the fever slight, the subjective symptoms have diminished, and there is very little suffering. It is in these cases that an operation in two sittings is indicated. An incision is made down to the peritoneum, and the exudation which had been previously present, is again

sought for and can frequently now be detected. This procedure also favors the development of the abscess towards the incision, as the point of least resistance, and the formation of adhesions between it and the peritoneum. Under this treatment (the wound being tamponed) the exudation becomes larger more distinct and superficial, and may be punctured after a few days. If pus is found, the abscess—which has meanwhile been shut off by adhesions from the general peritoneal cavity—can be safely incised, and its purulent contents evacuated. Among twenty-two cases upon which the author operated, this procedure could be carried out only in seven, but in these the results were very favorable.

The incision of the abdomen should be long, curved, and similar to that employed in ligation of the common iliac artery; and to avoid the subsequent development of a hernia, should be made as near as possible to the crest of the ilium. The aponeurosis, muscles and thin fascia transversalis are successively divided, and after arrest of the hemorrhage, the peritoneum is laid bare. The position of the abscess is determined by palpation, and the wound is then tamponed. On the following day the dressings are changed, the examination repeated, and a puncture made; and this treatment is continued until the abscess has come to the surface and adhesions have formed. Then the abscess is punctured, and a fine sound introduced, or it may be opened with the Paquelin cautery, and a drainage tube inserted. As a rule, the incision is followed at once by discharge of an enterolith or fecal mass, together with ill-smelling pus, from the opening. The drain is left in the wound, which is dressed daily, but not irrigated, and the abscess heals slowly in four or five weeks. Frequently a small discharging fistula remains in the vermiform appendix, which usually closes without further treatment. In all cases where the abscess was deeply situated, the author was able to detect it by following this method. In a number of cases he practised an immediate incision, and in some obtained a cure, while others died of sepsis. If the abdominal walls are very tense, the abscesses may not come to the surface but lie deep in the pelvic cavity; in other cases, however, they become superficial and can be detected by palpation. Of twelve cases in which the author made an immediate incision, six recovered promptly and five died of sepsis, which was present before operation. In another case where the operation was performed in two sittings, the appendix was adherent to the intestines and sepsis was already present. At the autopsy the abscess was found at the rectum, and therefore in an inaccessible place. Inasmuch as the danger of sepsis is enhanced by a rapid development of the abscess, it is necessary to operate early, if the operation can be performed without risk to the patient.

As regards the frequency of recurrences after

these operations, it is difficult to present accurate statistics. It is probable that abscesses which have been drained heal completely. Even if a purulent exudation is found to diminish in size, it must be remembered that residual deposits may be left behind, which may give rise to recurrences. If attacks of colicky pains in the ileo-caecal region have previously occurred, the case, although apparently primary, may actually be a recurrence. There are cases of perityphlitis with pus formation, where the symptoms are relieved by rest in bed, but recur after a long time. The treatment of these conditions is very difficult, owing to the presence of adhesions and residual exudations.

The excision of the vermiform appendix is the ideal of surgical treatment in these cases. Of course, it is not good practice to make an immediate incision in every case of colicky attacks, but there are a series of cases in which the symptoms point to the appendix as the source of the trouble. In a case where the abscess was situated behind the peritoneum and over the psoas muscle, this condition was suspected before operation for the following reason: The patient could not extend the leg which was held in a flexed position, so that it seemed probable that the appendix was situated immediately over the muscle, and this surmise was confirmed by the operation. The appendix was resected without injury to the peritoneum, and the patient made a complete recovery. In a second case the appendix was situated so superficially that it could be felt distinctly through the abdominal wall; resection was also performed, and a perfect cure obtained.

In conclusion, the author presents the following indications for operative treatment in perityphlitis:—

1. We must strive by all possible means to differentiate clinically between the simple inflammatory and the purulent forms of perityphlitis. The sero-fibrinous exudations, which usually result from faecal obstruction in the caecum and colon, are generally reabsorbed in healthy persons, even if they are extensive, and do not require surgical interference. It is only in patients suffering from tuberculosis or acute or chronic intestinal diseases that these exudations may become purulent in consequence of perforation, and they then require very simple surgical procedures, as general peritonitis is extremely rare in these cases.

2. Purulent exudations, originating in the vermiform appendix, cannot be absorbed. In these cases the disease has been preceded, at greater or less intervals, by attacks of colicky pains in the ileo-caecal region. The exudation, which is circumscribed and small at the beginning, is the result of gangrene and perforation of the appendix, and is of purulent or sero-purulent character. The experienced and careful physician will usually be able to recognize

these forms of purulent perityphlitis with certainty.

3. The more superficial a purulent perityphlitic exudation is situated, the earlier an operation is indicated, that is, within the first few days after the occurrence of the initial symptoms. A simple incision is sufficient in most cases, owing to the presence of adhesions.

4. If, however, the exudation is small, indistinct and deeply-situated, we should perform the operation in two sittings, as early as possible after the beginning of the disease, especially if the resistance and dullness disappear on account of the increasing meteorism; for experience teaches that by proceeding in this manner we are able to discover again the purulent deposits, and lay them open without injury to the peritoneum and risk to the patient.

By this treatment, the operation is deprived of its dangers, and even in doubtful cases this procedure is a rational one. The surgical methods described above will enable us to avoid the uncertain results of a spontaneous cure, the dangerous recurrences, and the occurrence of fatal general peritonitis in apparently mild cases.—*Berliner Klinische Wochenschrift*, No. 2, 1891.—*Internat. Jour. of Surgery*.

## ON THE NATURE AND TREATMENT OF ECZEMA.

Unna writes on the above subject in the *British Journal of Dermatology*, and makes a strong plea for the specific nature of the disease. He believes that the true and essential cause is the inoculation of a germ, probably of vegetable nature. The germ, however, proliferates in the epidermis and its appendages, only when the soil is suitable for its growth. The various predisposing and exciting causes which have previously been regarded as the sole causative factors must now be regarded only as preparing the nutrient basis for the reception and proliferation of the germ. The congenital nature of the skin (heredity), supervening diseases, especially those which alter the skin secretions (rheumatism, gout), changes in the skin tissue such as take place at the various periods of life (dentition, menstruation, climacteric), and other intercurrent diseases of the skin (acute exanthemata)—can be all considered as predisposing causes, or, better, as pre-existing improvements of the nutrient base. External warmth and moisture, simple inflammations and stases, as well as all external irritants, may be described as exciting causes, or better, as accidental improvements of the nutrient base. The parasitic theory, then, instead of denying all the previous observations which have been made on the aetiology of eczema, requires them as essential auxiliary causes. In defining eczema, Unna modifies slightly the definition of Erasmus Wilson, and



calls it "a chronic parasitic catarrh of the skin with desquamation, itching, and the disposition to respond to irritation by exudation and well-marked inflammation." The author concludes his interesting article as follows:

1. The treatment of chronic eczema may be considered with advantage under two heads: (a) By the use of antiparasitic measures the germ itself is attacked. This is the direct treatment. (b) On the other hand, by it the epidermis, which is the nutrient soil, becomes less suitable for the growth of the specific germ. This is the indirect treatment.

2. The radical treatment of eczema aims at the destruction of every single germ in the depths of the epidermis.

A disappearance of the eczema efflorescence is by no means equivalent to a thorough cure of the disease, which is, however, always attained by the prolonged and continuous use of specific measures.

3. There are various chronic eczemas, which may be distinguished with certainty by their clinical symptoms and course. They do not by any means always pass through the so-called "stages" of eczema, of which we hear so much, but each form has its own type, its own variations, and of course its own specific treatment. As examples I may quote the eczema of scabies, the seborrhoeic eczema, follicular eczema, and papular eczema.

4. As the therapeutics of these aetiologically different eczemas is not the same, I will limit myself to special suggestions for that variety which is the most common—viz., the seborrhoeic eczema. This begins as a desquamative erythema, similar to pityriasis, and continues as such, or develops either into an oozing eczema or into squamous or crusted psoriasis-like eruptions. When it becomes vesicular it is chiefly from the effect of external irritation.

For the treatment of this eczema we possess as specifics strong alkalis, several metallic oxides, and the reducing group of medicinal agents. In this series of specific remedies the most worthy of mention are caustic potash, zinc oxide, lead oxide, mercuric oxide, sulphur, resorcin, pyrogallol, chrysarobin, and the various kinds of tars.

5. The choice of the remedy and its form of application are determined in seborrhoeic eczema, as in all forms of eczema, by the degree of inflammation which is present.

When the inflammation and oozing are pronounced, the milder specifics are indicated, such as zinc oxide, lead oxide, sulphur, resorcin, in the form of powders, lotions, pastes, and glycerin gelatines. When the inflammation is less and the dryness greater, the stronger specifics such as chrysarobin, pyrogallol, tar, and mercuric oxide, are indicated, especially in the form of salves, salve mulls, plaster mulls, and waterproof dressings.

6. It may be taken as a general rule that among the remedies and modes of application those must be selected for each case which will produce the most powerful effect on the specific germ (direct or indirect) without exciting an artificial inflammation. A really "irritating" treatment is not necessary, even in the case of the oldest and dryest eczemas; if only provision is made for thinning down the horny layer (an ordinary sequence), the specific agents will have the desired effect without any irritation whatever. Indeed, an irritating mode of treatment of eczema is only justified on principle when it is used as a test to spots which are apparently healed, in order to recognize the presence of any surviving germs which they may still contain. The alternation of anti-eczematous and provocative treatment corresponds to Tyndall's interrupted sterilization.

7. The only internal remedy which exercises any specific though limited influence on seborrhoeic eczema, and especially on its drier forms, is arsenic. All other forms of treatment of the general organism, and of other organs which have a direct association with the skin (such as the bowels, uterus, kidneys), all baths (except sublimate bath), may be considered only in so far as they may possibly assist the local treatment of the skin in an indirect way.

8. In the search for new specifics against the various forms of eczema their harmlessness for the general organism must be taken into consideration, and with regard to the reducing medicinal agents in particular it must be noted whether there is an absence of irritating property in their oxidation products.—*Jour. of Cutaneous and Genito-Urinary Dis.*

## THE RELATION OF THE CORTEX TO VISION.

Bechterew (*Archiv. Psychiatr. Neurolog., etc.*, 1890, No. 1, Russ.) has reinvestigated the whole subject of the relation of the cerebral cortex to vision, and he finds that the area which is associated with vision is very extensive, occupying the whole of the occipital lobe, both on the outer and inner surfaces, and a considerable part of the parietal. In this area are two centres, which to a considerable extent overlap each other. One occupying the part of the parietal lobe is associated with the corresponding half of both retinae, and the other, which occupies chiefly the parietal lobe, but also in part the occipital, corresponds in function to the whole of the opposite retina.

The fact that these two areas overlap so considerably will probably do much towards harmonizing the previous contradictory results at which experimenters have arrived.—*British Med. Journal.*

## DIFFERENTIAL DIAGNOSIS BETWEEN ULCER AND CANCER OF THE STOMACH.

Kollmar says that in the great majority of cases the diagnosis between ulcer and cancer of the stomach is easily made, but that in not rare cases it may be difficult. In some cases the course of ulcer of the stomach is without striking symptoms, and the disease is perhaps first discovered at the autopsy, or makes its presence known by sudden profuse hæmatemesis or by a perforative peritonitis. Cancer of the stomach may also exceptionally exist without peculiar characteristic symptoms, the only symptoms being a steadily progressing marasmus and profound cachexia, without any other recognizable cause. Usually, however, pronounced digestive disturbances, pain in the region of the stomach, and vomiting, with or without admixture of blood, point with certainty to serious disease of the stomach; but whether it is ulcer or cancer must be determined by other considerations.

The points to be considered in the differential diagnosis of the two diseases are, the age of the patient, the character of the pain, the character of the bleeding, the degree of acidity of the gastric juice, the duration of the disease, the condition of the nutrition of the patient, and the presence or absence in the gastric region of a palpable tumor.

As regards age, gastric ulcer is most frequent between the ages of fifteen and twenty years; but it is not rare in old persons. Cancer of the stomach is most frequent between the fortieth and sixtieth years of life, eighty-two of Kollmar's one hundred and eighteen cases occurring during this period. Kollmar's statistics of one hundred and eighteen cases of cancer seen in the last twenty years at the medical clinic at Tübingen, gave an average age of fifty years.

Localized pains, "wound pains," are characteristic of gastric ulcer, but they are not present in all cases, and are found in gastric cancer in the stage of ulceration. Diffuse pains, dyspeptic discomfort, and cardialgia, are common in both diseases. The pain in gastric cancer is usually less intense than that in gastric ulcer.

Hæmatemesis varies greatly in character and quantity in both, but generally profuse hæmorrhages are more frequent in ulcer.

Absence of hydrochloric acid from the gastric juice is not an absolutely certain sign of the presence of cancer. A negative reaction is obtained in some cases of amyloid degeneration of the gastric mucous membrane, in cancer of the duodenum and œsophagus, and in poisoning with acids; and the reaction is frequently negative in gastric catarrh, in atrophy of the gastric mucous membrane, and in persistent fever. A temporary absence is not rare in gastric catarrh and dilatation of the stomach. In the latter diseases the reaction may be obtained by repeat-

edly washing out the stomach. Kollmar reports a case of this kind. A decidedly positive reaction speaks with considerable but not absolute certainty against the diagnosis of gastric cancer; while a negative reaction, because it occurs in other diseases of the stomach, should at least not be regarded as characteristic of cancer.

The duration of the disease is of great importance in the diagnosis. Gastric ulcer runs a very chronic course, frequently lasting years; it may get well and subsequently recur. The course of gastric cancer is different, as it is very exceptional for it to last longer than two years, and usually death occurs much sooner. A preceding history of stomach trouble lasting for years, getting well for a time and then relapsing, is against the diagnosis of cancer even in old persons.

Cancer sometimes, but very rarely develops in the scar of an old ulcer. Kollmar has been able to find only fourteen cases of this kind reported in the literature upon the subject. Details of cases by Dittrich, Meyer, Lebert, Heitler, Platon, Rosenheim, and Kulcke are given. It is not reasonable, therefore, to pay too much attention to these exceptional cases in the diagnosis. Both ulcer and cancer may both be present in one patient.

An important diagnostic point is the condition of the patient's nutrition. Great and early emaciation and cachexia occur in the great majority of cases of gastric cancer, whereas in ulcer the nutrition is often relatively good. But when the ulcer has persisted a long time, and the stomach has become dilated, and frequent vomiting and hemorrhages occur, the picture of the disease is very much like that of cancer.

A sign, surpassing all others in diagnostic importance, is a palpable tumor in the stomach region, which is almost always present in cases of cancer. It may be simulated by scar tissue about an ulcer, by a sacculated peritoneal exudate, by an hypertrophied pylorus, or by a tumor of a neighboring organ. In such cases watching for the growth of the tumor leads to a correct decision, though in some cases increasing atrophy of the abdominal walls, by making the tumor more readily palpable, has made it appear to grow larger. Reinhard has collected sixteen cases of simple ulcer of the stomach with tumors. In six cases the tumor was caused by hypertrophied pylorus from cicatricial stenosis; in six it was the result of adhesions between the stomach and other organs, caused by the ulcer, and in part also by encroachment of the ulcer itself upon these organs; in three cases there were foreign bodies in the ulcer; and in one case an encapsulated abscess. All the sixteen patients were of an age at which cancers are common: thirteen were women and three men. A tumor of the head of the pancreas may lead to error. In such cases as Rein-

hard's, the duration of the disease is a great aid in the diagnosis.

Kollmar concludes his paper by reporting three interesting cases. In the first case, a woman forty-eight years old had suffered from gastric ulcer for thirteen years. Subsequently a marked tumor and severe cachexia appeared, so that it was supposed that a cancer had developed. The autopsy revealed a gastric ulcer but no cancer was found. The second case was that of a woman forty-six years old who had had a disease of the stomach for twenty-three years. A diagnosis of gastric ulcer was made in spite of the presence of the gravest cachexia, a decided tumor, and the absence of hydrochloric acid in the gastric contents. This diagnosis was confirmed by the autopsy. In the third case, a woman fifty-three years old, with the gravest anemia and cachexia, had had disease of the stomach for a great many years. The diagnosis was gastric ulcer without carcinoma, and was confirmed by autopsy.—*Berliner klin. Wochenschrift*, February, 1891. *Medical News*.

### THE TREATMENT OF BURNS.

In the Friedrichshain Hospital in Berlin the following is the method of treatment of burns employed by Dr. Bardeleben (*Lyon Medicale*, September 14 1890).

The burned surface is first carefully washed with a two or three per cent. solution of carbolic acid or a three per mille solution of salicylic acid. The blisters are then opened, and the entire surface covered with subnitrate of bismuth finely powdered, and over this a layer of cotton wool. This dressing is to be renewed as soon as it becomes at all moistened by discharges from the wound. If the burn is very extensive, an ointment of bismuth is substituted for the dry powder.

Dr. Bardeleben asserts that with this dressing cicatrization is much more rapid and suffering much more quickly relieved than is the case with any other form of treatment.

He states that, in spite of the large quantity of bismuth which he has employed, he has never seen any symptoms of poisoning follow its use. *Therapeutic Gazette*.

### CROUPOUS PNEUMONIA.

John Playfair, M.D., in *Edinburgh Med. Jour.* says:—The treatment should be mainly expectant, and therefore little need be said of it. Continuous hot moist applications to the chest were not employed. Such applications I believe do harm. They impede the movements of the chest by their weight, tend to increase fever, and generally are anything but comfortable.

All the counter irritation required is secured by the application, to the back of the chest, of a

few hot linseed meal poultices sprinkled over with a little mustard. Each poultice should be kept on for about twenty minutes, and in the intervals the chest enveloped in a light layer of cotton wool. Internally if the cough is troublesome, an occasional dose, according to age, of a mixture of equal parts of syrup of tolu and syrup of chloral should be given. If the patient seems to be getting exhausted, and the pulse becoming rapid and feeble, the chloral and tolu mixture should be stopped, and a mixture of carbonate of ammonia, tincture is often required about the time of the crisis or immediately after, as already mentioned. Alcohol was also usually given at this time.

As regards antipyretics, I find tepid sponging is by far the safest and most effective means of bringing down temperature in children. It is easily carried out, and a skillful nurse can sponge the patient as often as necessary without in the least disturbing or exposing him. My rule is to sponge whenever the temperature reaches  $102\frac{1}{2}^{\circ}$ , and to do so every two hours till the fever is reduced two degrees. Antipyretics, such as antipyrin and antifebrin, are given in some cases also, and usually with good effect. Occasionally, however, the effect is greater than expected; and the consequent exhaustion more pronounced than desirable. For that reason, chiefly, I prefer the sponging, unless in a case of hyperpyrexia, as in cases where the temperature runs to  $106^{\circ}$  and  $107^{\circ}$  when antipyrin and antifebrin should be used and the wet packs also resorted to. I prefer antipyrin to antifebrin as being decidedly less depressing.

During convalescence, iron, maltine, and cod-liver oil are the chief medicinal agents relied upon.—*Archives of Gynecology, Maryland Med. Jour.*

### ICHTHYOL TREATMENT.

From the Univ. Female Clinic at Strassburg, new contributions to the treatment of certain womb troubles with ichthyol, by Hermann W. Freund, in Strassburg.

We received a paper reprint from the *Berliner Klinische Wochenschrift* No. 11, 1870, discussing the good effects obtained from the ichthyol treatment. In the v. Braun Clinic at Vienna, 100 cases were treated by Dr. Reitman and Schonauer with this remedy, showing good results. A five or ten per cent solution of the ichthyol in glycerin is used in the form of tampons, also in suppositories.

Very good results were obtained in old perimetritis exudations after other means had failed. No bad results from ichthyol were as yet observed.

The author has used this remedy in many cases of endometritis, both cervical and corporeal. The procedure in these cases is as follows: The first few days rest in bed with antiphlogistic

measures and tamponing of vagina with ichthylol glycerin. The inflammation goes rapidly down, then an application to the uterus of pure solution of sodium ichthylol and daily washing out with a warm astringent solution. The author uses sod. chloride.

The application of ichthylol is only necessary once a week. Observation for months afterwards of these cases showed their entire cure; two of these cases were of gonorrhoeal nature. But the most marked and prompt benefit was gained from this remedy in cases of chronic corporeal endometritis.—*Maryland Med. Jour.*

### THE TIME OF DAY FOR OPERATIONS.

There is considerable difference of opinion amongst surgeons as to whether it is best to operate early in the morning or in the afternoon. Many prefer the morning. They say that the patient is saved the suspense of being kept waiting till the afternoon, and the surgeon has the better chance of a good supply of sunlight or its equivalent in this country. Both these reasons have considerable force. Other surgeons maintain that early operating implies a sleepless previous night. The shades of evening, a greater promoter of sleep than blinds and screens, come on sooner when the operation is performed in the afternoon. This physical fact also implies greater chances of rest in another respect, for there is less fear of subsequent disturbance from noises inside or outside the house when the surgeon operates late. Long operations may seriously tax the surgeon's strength and nerve, and in this respect again the afternoon is better for operating than the morning. In private practice and wherever freedom from noise and plenty of warmth can be ensured, the morning is probably the best time, especially in the summer. As far as light—a most important factor—is concerned, the time of day makes little difference at this time of the year in London, though the danger of a sudden darkening of the atmosphere is, perhaps, greater in the afternoon.—*Brit. Med. Jour.*

### GUAIAC AS A LAXATIVE.

Murrell (*Medical Press and Circular*) thinks that guaiac is a valuable laxative. His attention was drawn to the subject, two years ago, by casually prescribing guaiac lozenges made up with black-currant paste, for a man suffering from rheumatism. The man continued taking the lozenges long after the pain had ceased, and in explanation said that they did him good by acting on the liver and bowels, and said that one or two lozenges taken in the morning before breakfast produced a stool promptly and without inconvenience. The author ordered the lozenges others of his patients suffering from con-

stipation, and what is conventionally called "biliousness," and the results were equally satisfactory. The lozenges not being available for hospital use, he had a confection prepared containing ten grains of guaiac resin to one drachm of honey. This, for the last two years, he had used extensively not only as a purgative, but in the treatment of chronic rheumatism, sciatica, tonsillitis, dysmenorrhœa, and allied affections. He gives from one to two drachms three times daily. The purgative effect is very pronounced, and in one case the patient had fifty-six evacuations in one week. In another case it produced a well marked rash, covering the arms and legs with an eruption which forcibly reminded one of a copaiba rash. It was accompanied by intense itching which disappeared on discontinuing the drug. The guaiac not infrequently gives rise to a burning sensation in the throat, and to obviate this he prescribes ten grains of the resin in half an ounce of extract of malt. He believes that a trial of guaiac, either as a laxative or purgative, according to the dose employed, will be found satisfactory. It is possible that if the drug were triturated with cream of tartar, or with some inert substance, such as sugar of milk, its efficacy would be increased, and that it would produce the desired effect in smaller doses.—*London Medical Recorder*, November 20, 1890. *Medical News.*

### RESORCIN IN DIPHTHERIA.

Heft 9, 1890, *Centrablat f. d. Gesamte Therapie* brings an article on the value of resorcin in diphtheria, being a very active antiseptic and harmless even in solution, containing ten per cent. of it. A ten per cent solution in glycerin penetrates the tissues rapidly. At the St. Lazare Hospital it has proved servicable in diphtheria.

It should be used every one or two hours, day and night, locally to the diseased spots. A spray of a five per cent. solution should be kept up in the room of the patient, and further, two to four teaspoonsful of a two per cent. solution of resorcin in syrup terebinth. should be administered daily.

In diphtheria of the larynx resorcin was of little value.—*Maryland Med. Jour.*

### APPLICATION FOR CHRONIC PHARYNGITIS.

The *Canada Lancet* quotes the following prescription for the treatment of chronic pharyngitis:

R.—Ergotin	15 grains.
Tincture of iodine	1 drachm.
Glycerin	1 ounce.—M.

To be applied three times daily, with a soft brush.

## TREATMENT OF GASTRIC ULCER.

Donkin (*Wiener Medizinische Presse*, November 2, 1890) thinks that the best results in the treatment of gastric ulcer are obtained by giving the patient neither food nor medicine by the mouth, and relying upon rectal alimentation. He does not believe that gelatin suppositories and peptonized preparations have any advantages over beef-tea and milk in rectal feeding. The patient should receive at intervals varying in different cases  $2\frac{1}{2}$  ounces of beef-tea and from  $\frac{1}{2}$  to 1 ounce of brandy either with or without the yolk of an egg. An equal amount of milk may be substituted for the beef-tea, or the enema may consist of equal parts of each. It is necessary to wash out the rectum before each injection and if it becomes very irritable a few drops of laudanum may be given with each enema. By the mouth, the patient may be occasionally given a small piece of ice but absolutely nothing else. Morphine, given subcutaneously to allay the pain, the author considers the most useful drug that we have in the treatment of gastric ulcers.

In Donkin's experience this treatment causes the gastric symptoms to disappear in from ten to nineteen days, when in addition to the enemata small quantities of milk and bouillon may be given by the mouth. The author has also adopted this method in the treatment of many obstinate cases of dyspepsia.—*Med. News.*

## SOMNAL.

As a result of several experiments upon animals and fifty-four administrations to man Dr. W. Gilman Thomson (*New York Medical Journal*, Nov. 29, 1890) comes to the following conclusions:

1. The effects of somnal are much more striking and certain than those of urethan, and far less depressing than those of chloral.

2. There is no vertigo or depression after taking somnal, such as may follow the use of sulphonal.

3. The action of somnal is usually very prompt, and doses of half a drachm disguised in a little syrup of tolu or whiskey are always well borne, easily taken, and entirely without deleterious effects.

4. The drug in doses of a drachm is not powerful enough to control decidedly delirium tremens, maniacal delirium, or severe pain.

5. In doses of from thirty to forty minims somnal is a safe and reliable hypnotic for ordinary insomnia.—*Medical News.*

TO REMOVE THE SMELL OF IODOFORM FROM THE HANDS.—For this purpose Bienert recommends (*Pharm. Zeitschr. Russl.*) washing the hands once or twice with flaxseed-meal in water. He states that the odor very quickly disappears.—*Medic. Bulletin.*

## NATURE, ETIOLOGY, AND TREATMENT OF SCROFULA.

Scrofula was considered for a long time as a disease (Lugol) with a prodromal period which was designated the "scrofulous habitus." The course of the disease was divided into four periods: The first was characterized by the appearance of eczema, impetigo, nephritis, chronic coryza, otorrhoea, enlarged tonsils, and acute suppurating adenitis. The distinguishing characteristics of the second stage were various affections of the skin and mucous membranes, followed by exuberant ulcers, and chronic suppurating cervical adenitis, leaving fistule and depressed cicatrices. In the third period were grouped cold abscesses, glandular enlargements, periostitis, hyperostoses, caries, necrosis, and "white swellings." The fourth period comprised diseases of the viscera, bronchial, pulmonary, and pleural tuberculosis, scrofulous lesions of the prostate, bladder, kidneys, testicles, ovaries, vertebrae, and brain, together with amyloid degeneration.

This theory has been entirely abandoned, owing to the advance in bacteriology and pathology during the past thirty years. To-day we recognize the scrofulous diathesis, a condition which predisposes to certain affections, such as the dermatoses and catarrh of different organs, which, however, are not specific, as was formerly believed. These different diseases do not at first present anything peculiar in their symptoms and development, but at length it will be noticed that their progress is not as frank as it should be, the inflamed parts become hypertrophied and tumefied, resolution not being complete. The disease has a tendency to become chronic, in which state the least cause gives rise to a subacute condition. There is thus established a predisposition which renders more easy the development of scrofulous diseases, catarrhs, inflammations of the skin and mucous membranes, which by their repetition and chronic tendency, produce the so-called "scrofulous habitus." Associated with this diathesis there is thickening of the upper lip and alae of the nose. There is, however, nothing specific in this condition. As to the causes of this diathesis: First, it is hereditary in the full meaning of this term—a scrofulous parent transmits the disease to his child. Second, the general condition of the parents at the time of the procreation of the child exerts an influence upon the nature of its tissues and their future nutrition. An aged, sick or syphilitic father may engender a scrofulous child, while sickness, persistent vomiting, or hemorrhages in the mother during gestation may have the same influence upon her offspring.

Again, the scrofulous diathesis may be acquired during the first months of a child's life, through bad hygiene or sickness. It may also be induced by an artificial or incomplete lacta-

tion, either because the nurse is too old or the milk too poor, or too rich in fats. Premature feeding of a child with coarse foods, and the gastro-intestinal diseases which result from it, with their attendant symptoms of vomiting, diarrhoea, acid fermentation, and intestinal or gastric dilatation, may also induce scrofula. An interesting fact, and one which is undeniable, is the close relation existing between joint affections and scrofula. The children of gouty and diabetic people, the most typical arthritics, are often scrofulous. These children are greatly predisposed during their first years to the same diseases as are the children of scrofulous people.

As regards treatment, it is necessary to improve the nutrition, and to favor tissue change. The hygiene of the mother should be looked after during pregnancy, a good nurse should be provided for the baby, and its feeding carefully attended to. Later, the baby's food should be selected with reference to the proportion of proteids and fats. The function of the skin may be maintained by dry frictions, salt and sulphur baths during the winter, and cold baths or douches during the summer. Sunlight, exercise in the open air, alternate sojourns upon the plains and in the mountains, avoidance of damp climates, and abstinence from alcoholic as well as stimulating drinks like coffee and tea, are essential in the treatment. The drugs to be employed are the iodides, iodoform, arsenic, iron, and tannin, which should be used alternately.—Gendre, in *Journal de Maladies Cutanées*, December, 1890. *Medical News*.

### TREATMENT OF CYSTITIS IN WOMEN.

According to Gaubet (*Archives de Tocologie et de Gynécologie*, January, 1891), the treatment of cystitis in the woman comprises: 1. Urinary antiseptics; 2. Medical treatment; 3. Medico-surgical treatment; and lastly, true surgical procedures. An antiseptic condition of the urine is best produced by the administration of salol, which, under several experienced observers, has given excellent results. The borate of sodium, according to Terrier, has given rise to gastric troubles, while the benzoate of sodium and benzoic acid have been proven to be inefficient in producing the desired effect. Bazy having tried salol, found that the drug is very well borne, even by the most delicate and rebellious stomachs, in doses of one and a half drachms, although one-half to one drachm is generally sufficient. This occasionally, not always, causes a diminution in the pain and smarting during micturition. The elimination occurs generally on the first day, but may be delayed twenty-four hours, and it may continue during one or two days, and even more, after the stoppage of the drug. The cases in which salol acts most efficaciously are the purulent catarrhs of the bladder, and in such cases it should be given in doses of

from fifteen to thirty grains. Salol does not act, however, to any appreciable degree upon suppurations of the urinary passages.

Antisepsis of the urinary passages, finally, is completed by observing perfect antiseptic measures in regard to the instruments which are used. Boiling water is generally sufficient to disinfect all metallic instruments. Should the bladder require washing out, it should be done with sterilized instruments; and the fluid used should be a solution of boric acid or of dilute silver nitrate. In patients in whom the entire organism has become infected, it is necessary to prevent the infection from becoming aggravated by suppressing the cause as far as is possible. This requires a careful investigation into the condition of the bladder, the ureters and the kidneys. Secondly, elimination of the poison by the natural emunctories should be facilitated; by the skin through the aid of sudorifics; by the kidneys, by means of revulsives over the lumbar region and large quantities of diluent drinks. It is also necessary to destroy the poison in the system by means of quinine, and to increase the resisting powers of the patient by the use of tonics. To repeat, antisepsis of the urinary passages comprises the administration of salol in half-drachm doses daily for two or three days before the operation, intra-vesical douches of boric-acid water (3 part to 100), and the disinfection of the instruments employed.

The medical treatment of cystitis includes primarily injections of morphia. Barley-water, linseed tea, and other diuretics will calm the pains attendant upon micturition, by freeing the urine from its irritating properties. The mineral waters have little action in the treatment of painful cystitis. Rest is an important element in the management of these cases. Opium, chloral, bromide of potassium, and belladonna should be given for the pain, and purgatives and enemata for the relief of the constipation.—*Med. News*.

### ARSENIC IN PHTHISIS.

Ladendorf employs the following solution of arsenic in hypodermic injections to reduce the fever of phthisical patients:

Fowler's Solution,	M xxx
Distilled Water,	5 iiss
Hydrochlorate of Cocaine,	grs. i

About 15 minims of this is injected every third day.—*Medical News*, January 4, 1891.

### TREATMENT OF GALL STONES.

The usefulness of pilocarpine seems to be increasing. According to the *Bulletin Gen. de Therap.*, Lekwekikie makes the assertion that pilocarpine is almost a specific in the treatment of gall stones. It relieves at once the pruritus of jaundice. The dose hypodermically is one-eighth of a grain twice a day. Thirty cases have been treated successfully.

## RESORCIN IN DIPHTHERIA.

Leblond and Baudier have shown that in resorcin we have an antiseptic of the first rank. Its easy solubility in all fluids, its rapid evaporation by heat, in addition to the completeness with which it mixes with air, render it suitable for the destruction of all pathogenic microorganisms. Roux and Yersin have demonstrated that diphtheria attacks only open wounds, consequently all further injuries to the parts affected ought to be carefully guarded against; therefore all mechanical modes for the removal of the diphtheritic membranes are to be avoided; and the same may be said of the use of drugs for a like purpose. The latter are particularly dangerous on account of any excess which may fall on healthy tissues, so preparing fresh ground for the morbid process. Any antiseptics which may be used ought not to have injurious effects on the healthy parts not attacked. Such an antiseptic is a 10 per cent. solution of resorcin in glycerine. The solution should be applied by means of a brush every hour during the day, and every two hours during the night; the air of the room should also be kept saturated by means of a spray apparatus containing a watery 5 per cent. solution of resorcin. The conclusions arrived at by Andeer, of Munich, in a summary of the subject are: (1) When the larynx is not affected the disease usually disappears in from six to ten days. (2) If the treatment is adopted at the commencement of the attack the formation of membrane is very slight, and the larynx usually escapes. (3) In advanced cases, if the glands are swollen and *plaques* of membrane numerous over the back of the throat, after forty-eight hours' treatment by resorcin the swelling of the glands begins to subside, and the formation of any fresh membrane is prevented. (4) In all cases the general state of the patient remains satisfactory, the sustained appetite and clear voice proving that there is no serious constitutional affection. (5) If the larynx is attacked resorcin is not so beneficial; nevertheless, the drug may still be used advantageously by fumigation and pulverization, if there be sufficient space in the larynx to prevent asphyxia, or if tracheotomy is likely to prove of permanent relief.—*Lancet*, December 20, 1890.

## PATHOLOGICAL ANATOMY OF TIC DOULOUREUX.

Dr. C. L. Dana, in a paper on this subject, says that inveterate trigeminal neuralgias are usually caused by local disease, such as bony tumors, aneurisms, or syphilitic exudations; but the ordinary cases of tic douloureux occurring after middle life, affecting chiefly the second branch of the trigeminus, are not due to such cases. Little is known of its anatomy, it being generally believed that the disease is a neurosis. Anstie was of the opinion that tic and other

chronic neuralgias were due to atrophic changes in the root and sensory ganglia. Dr. Dana suggests that many cases of tic were due to an obliterating arteritis of the nutrient vessels of the nerve. His reasons for this are: (1) That the disease occurred only at the time of life when degenerative changes in the arteries began. (2) That it affects chiefly and primarily one of the terminal branches of the internal maxillary. If it extended or recurred, it involved the inferior dental. It rarely seriously affected the supra-orbital nerve, which was supplied by a branch of the internal carotid. Hence, the disease followed a certain fixed vascular distribution. (3) That he had examined four superior maxillary nerves, removed in typical cases of tic douloureux; in none were there any noteworthy changes in the nerves. In three of them, striking evidence of arterial disease was found. In the fourth case no blood vessel was present in the specimen. (4) The view that an obliterating arteritis was a factor in this disease was strengthened by therapeutic experience. Nitroglycerine, would sometimes relieve pain instantly and prevent a return for a long period of time. Aconite, which was so useful in this disease, also lowered blood-tension; while potassium iodide, which sometimes favorably modified arterial disease, was occasionally useful in tic. (5) That there was unquestionable evidence that the removal of the peripheral nerves sometimes cured tic entirely, and hence the disease was peripheral and due to some peripheral irritation. (6) Certain authors had recently stated that by a new method of injection, they had been able to discover a closer and more extensive relationship between the nerve trunks and blood vessels than had hitherto been known, and they suggested, in their conclusions, that disturbances in the blood supply might be a serious factor in causing neuralgia. The author then gave the histories of cases, which he considered typically corroborative of his theory. He adduced positive facts that the trigeminus and its roots, and even nuclei and deep roots were not diseased even in old and typical cases. In all cases where the vessels were examined, striking disease was found to be present. Circumstantial evidence was found by therapeutic experiment, and the general etiology, and anatomical distribution of the vessels and of the pains.—*Journal of Nervous and Mental Diseases*, January, 1891.

## PILL FOR TUBERCULOSIS.

The following is the formula of a pill, recommended by Chauvin, in tuberculosis:

R Iodoformi,	gr. $\frac{3}{4}$
Pulv. Doveri,	gr jss.
Ext. gentian,	q. s.

M. et. ft. pil. No. 1.

Sig. Take one of these pills thrice daily during meals.—*St. Louis Med. and Surg. Jour.*



## PHTHISIS; ITS CLASSIFICATION, EARLY DIAGNOSIS AND RELATION TO CHRONIC PNEUMONIA.

Dr R. Page believes that phthisis, as now generally understood and accepted, implies pulmonary tuberculosis, the germ of which is Koch's tubercle bacillus. It might be acute or chronic; but whether its progress be slow or rapid, or whatever form it may assume, there is but one phthisis, and that is tubercular. The prognosis of either form of chronic phthisis, catarrhal or fibroid, depends much on an early diagnosis. If the top of the left lung is affected an early diagnosis is much easier than if on the right side; since in health the patient already has exaggerated fremitus and petrophony on the right side, as well as slight dullness on percussion and rude, or vesiculo-bronchial respiration. These four signs of incomplete consolidation are seen in incipient phthisis, if they occurred on the left side. In addition to these, some localized adventitious sound is necessary. As chronic phthisis of either form usually begins as a localized tubercular capillary bronchitis, the first adventitious sound usually heard is the sub-crepitant or muco-crepitant rale. Any localized adventitious sound, however, in a suspicious case aids in a diagnosis of phthisis, whether it is the mucous click, an intra-pleural rale, etc. Frequency of the pulse and anorexia are among the earliest signs. Hemoptysis, if it were not explained by the presence of heart disease, would be almost conclusive. If the bacillus were found that, of course, would be sufficient evidence of the disease. In conclusion, he emphasizes the necessity of early diagnosis and prompt administration of remedies.—*New York Medical Journal*, February 21, 1891.

## TREATMENT OF TRACHOMA WITH THE BICHLORIDE OF MERCURY.

Drs. Gast and Otto Keining (*Deutsche Medizinische Wochenschrift*, Oct. 9th, 1890) advocate a method which they have found so efficient, that cases which have been under treatment by other means for long periods have been cured in from two to six weeks, even when there has been extensive pannus. The eye is first thoroughly irrigated with corrosive sublimate, 1 to 3,000, and then the lids are everted and firmly rubbed with a hard pad soaked in the same solution. If the ocular conjunctiva is affected, it is treated in the same way, any bleeding from granulations being disregarded. The frictions employed are proportionate to the severity of the case. When the granulations are so firm that the frictions do not evacuate their contents, they are squeezed out by cilia forceps. The treatment is repeated daily. Some reaction follows, but this need not prevent a repetition of the process. There is always rather free secre-

tion at first, but this disappears after the third to fifth day of treatment. To remove the secretions, the eyes are bathed, for an hour three times daily, in warm solution of the bichloride, 1 to 10,000, and the same plan employed when there is itching of the lids. If the lids swell considerably, the treatment is discontinued, and the lids are brushed with a milder solution. Sometimes membranes form on the conjunctiva; these should be allowed to come away spontaneously.—*Cuff. Med. and Surg. Journal*.

## MERCURIAL STOMATITIS.

In writing upon the subject of mercurial stomatitis Fournier claims that every time that mercury is administered it is at the risk of developing stomatitis. All the mercurial compounds, however, are not equally dangerous in this respect, and the mode of administration also has a bearing upon the production of stomatitis. The administration of mercury by inunctions is the mode which predisposes most markedly to this complication. If properly made—that is, not extending the application over a longer space of time than ten minutes, or using a larger amount than one drachm—inunctions are generally well borne; notwithstanding, it is necessary to watch the gums. If used in larger amounts than one drachm, even one and a half drachms *per diem*, salivation is apt to occur. This stomatitis is abrupt in appearance, and is more intense at first than that which follows the administration of the drug by the mouth. Fournier claims that the hypodermic injection of mercury, which was formerly believed to be free from the danger of producing salivation, is usually followed by disastrous effects within a few days.

There are certain conditions favoring the appearance of stomatitis during the administration of any of the preparations of mercury. Among these are *idiosyncrasy* and a *bad state of the mouth*, with a tendency to stomatitis. It is wise, therefore, to inquire into the history of the patient as to any susceptibility to mercury, and, in all cases, to make an examination of the mouth. The presence of the teeth is also a factor in the production of a stomatitis of this kind. Salivation never occurs in the newborn, nor does it occur in toothless old people. Workers in mercury mines suffer from frightful attacks of stomatitis until they lose their teeth, after which they have no further trouble. Sex, also, has a peculiar influence, women being much more susceptible than men to the effects of the drug. Denudation of the skin is a marked predisposing cause, and the dressing of vulvar mucous patches with a mercurial pomade has frequently resulted in an inflammation of the mouth. The genital surfaces are especially sensitive to the action of mercury, and a single inunction upon the scrotum may determine a stomatitis.—*Med. News*.



## THE EMPLOYMENT OF SPANISH MOSS AS A SURGICAL DRESSING.

Dr. Louis McLane Tiffany, of Baltimore, recommends the use of Spanish moss (*Tillandsia usneoides*) as a soft and elastic wound-dressing. This is prepared for commerce by being dried and beaten so as to free it from bark.

He usually has the moss made into cushions or pads of about six inches by four inches, and two inches thick, cheese-cloth being the material employed as a covering. The pads have been made of other dimensions; in one or two cases of mammary extirpation with extensive axillary dissection, pads large enough to envelop nearly one-half of the thorax were employed, but he finds no advantage in the use of such large cushions, and the size given has proved very generally applicable.

The pads are adjusted outside of a gauze-and-cotton dressing, and the bandage applied snugly, the elasticity of the moss serving to distribute the pressure evenly about the chest wall, as after a deep axillary operation. He has been especially pleased with the pads. A fact of a good deal of importance is that when exposed to the action of moist heat in a sterilizer the moss remains elastic, so that the cushions are prepared with the other dressings for each operation.—*Medical News*.

## TOMATOES AND CANCER.

Why or wherefore, it is impossible to say, but in some unaccountable fashion the impression has come largely to prevail among the public that tomatoes are a cause of cancer, and that for this reason the delightful vegetable in question must be eschewed. The only connection that we know of between cancer and tomatoes is that within past years there has been a large augmentation in the death rate from cancer, and an enormous increase in the consumption of tomatoes.—*Medical Press*.

[The real reason for the above statement is that some year ago some myopic investigator claimed that he found in tomato juice a cell that looked like cancer cell. He was fool enough to give it as his opinion that therefore cancer was caused by eating tomatoes.—*Am. Practitioner*.

## WARM SUBLIMATE SOLUTIONS.

Dr. Ahl has found, on the ground of numerous bacteriological and clinical experiments, that an application of heat to sublimate solutions increases their antiseptic powers, and at the same time diminishes their poisonous and corrosive effects. His conclusions are as follows: 1. The antiseptic action of a solution is increased by heating it above 40° C. (2) A solution of 1-20,000 or even 1-10,000, heated to 40° C., may be used without danger in penetrating wounds

of the lung, pleura, or peritoneum. The bactericidal effect corresponds to that of a 1-500 cold solution. (3) A solution heated to above 40° C. stimulates the formative properties of the tissues and accelerates the healing process. On the other hand, a cold solution of 1-1,000 has less antiseptic action than a warm solution of 1-10,000, because the latter penetrates more deeply. (4) The cut surfaces unite more rapidly than when a cold solution of 1-500 has been employed, because of the absence of caustic effects. (5) Warm and weak sublimate solutions may be used with perfect safety as regards poisonous and toxic effects.—*Internat. Pharmac. General-Anz.*

## ANOTHER REMEDY FOR PER- SPIRING FEET.

The Medical Press says that Dr. Winogradoff recommends a 5 to 8 per cent solution of chloride of zinc as an application for the prevention of undue perspiring of the feet. He begins by ordering the feet to be well washed in tepid water, and then dabs on the solution, wiping off the surplus a few minutes later. The application is best made at night, and may require to be repeated a week later. It acts as a caustic, destroying the sudoriparous glands, and should never be used except by the medical man himself.

## TREATMENT OF ERYSIPELAS.

Dr. Koch treated numerous cases of erysipelas with the following ointment:

R Creolin,	3 i.
Iodoform,	3 iii.
Lanolin,	3 i.

This ointment is spread as an even, smooth layer over the affected skin and its surroundings, on an area of at least two to three inches to the outside of the inflamed parts. The whole is covered by a piece of mackintosh. Dr. Koch selected creolin in the above prescription because he thought that it was possessed of first-class disinfectant properties, without sharing the dangerous after effects of carbolic acid. Iodine, which is derived from the decomposition of iodoform, stimulates absorption of inflammatory products. Lanolin has been chosen because it penetrates the skin best of all ointment bases.—*Amer. Prac. and News*.

## CHRONIC GONORRHOEA.

Dr. Roicki recommends injections of ergotine in chronic gonorrhoea. He recommends it as a promptly acting remedy. The injections of the same are borne very comfortably by the patient. He prescribes it in the following formula:

R Ergotine,	grs. vj.
Aq. dest.,	3x.

M. Sig.: Three to six injections daily.—*Deut. Med. Woch. Med. Review*.

## ITEMS OF INTEREST TO THE PROFESSION.

## TREATMENT OF BALANITIS.

Dr. W. R. Chichester states that he has obtained good results from the employment of the following (*Med. Rec.*) :

R	Atropiæ surphatis,	gr. i
	Zinci sulphatis,	gr. ij
	Acid. boracic,	gr. v
	Aquæ destillat.,	℥j

M.

Sig. Apply two or three times a day with a brush.

He further states that this is open to any modification which the case suggests.

## MIXTURE FOR DISSOLVING DIPHTHERITIC MEMBRANES.

Caldwell is stated by the *Medical News*, to recommend the following solution for this purpose :

R	Papain	3 ijss.
	Hydronaphthol,	grs. ij.
	Acid. muriatic.,	gtt. xv.
	Aq. destillat.,	℥ ij.
	Glycerini,	℥ ij.

M.

Sig. Apply to the affected parts every half hour by means of an atomizer.

## COPPER IN CHLOROSIS.

Luton has recommended the following formula, from the use of which Dr. Liégeois has obtained excellent effects in chlorosis :

R	Neutral acetate of copper	gr. ½
	Crystallized phosphate of sodium	gr. ½
	Liquorice powder,	
	Glycerin,	aa q. s.

M. ft. tal. pil. No. 12.

Sig. One pill immediately before the morning and evening meal.—*St. Louis Med. and Surg. Jour.*

## CYSTITIS IN WOMEN.

The *Journal de Médecine de Paris* gives the following prescription for cystitis in women :

R.—Citrate of potassium,	½ ounce
Fluid extract of tritium repens,	} of each 1 "
Tinct. of belladonna	
Fluid extract of buchu,	½ "
Water, a sufficient quantity to make	4 "

A teaspoonful in a wineglassful of water, three times a day.—*Med. News.*

## CRAYONS FOR ENDOMETRITIS.

Terrier recommends the following :

Powd. Iodoform,	10.
Powd. Gum Tragacanth,	.5

Glycerine and distilled water enough to make 10 crayons.

These are recommended in mild cases, when dilatation and exploration do not seem necessary. Either salol or resorcin may be used instead of iodoform, and in the same quantity. If the bichloride be preferred, it may be ordered as follows :

Mercuric Chloride,	.5
Talc Powder,	25.
Tragacanth Powder,	1.5

Glycerine and distilled water enough to make 50 crayons.

The vagina is first disinfected by bichloride solution (1:1000), then the crayon introduced and maintained in place by a tampon of iodoform cotton.—*Gazette de Gynécologie*, January 15, 1891.

## PRESCRIPTIONS FOR CONSTIPATION OF PREGNANCY.

The following prescriptions are given by the *Revue Général de Clinique et de Thérapeutique* for this condition :

R.—Rhubarb,	2½ drachms.
Boiling water,	4 ounces.

Make into an infusion and add carbonate of magnesium 2½ drachms, and manna 1 drachm. Order a tablespoonful of this every hour.

R.—Phosphate of sodium,	6 drachms.
Distilled water,	4 ounces.
Syrup of raspberry,	6 drachms.

A dessertspoonful of this may be given every half hour or hour.

Finally, if acidity of the stomach exists, the following may be given :

R.—Calcined magnesium,	2½ drachms.
Manna,	1 drachm.
Distilled water,	8 ounces.

A tablespoonful every hour until a purgative effect is produced.—*Med. News.*

## CANTHARIDAL COLLODION.

The following method of preparing cantharidal collodion is noted by the *Revue Général de Clinique et de Thérapeutique* :

R.—Cantharidin,	15 grains.
Castor oil,	1½ ounces.
Acetone,	1½ "
Tincture of cannabis indica,	2½ drachms.
Collodion,	1½ pints.

The cantharidin is to be powdered and dissolved in the castor oil with the aid of heat. After it is cooled the acetone and the collodion, and finally the tincture of cannabis indica, are to be added.—*Med. News.*

## ANÆSTHETIC MIXTURES.

The following formulæ for the preparation of the anæsthetic mixtures, are given in the *Médecine-chirurgicale Rundschau*. The A. C. E. mixture, according to this journal, is made by taking :

R.—Alcohol,	1 part.
Chloroform,	2 parts.
Ether,	3 “

Another method of making it is to use :

R.—Alcohol and ether,	1 part.
Chloroform,	3 parts.

With some the anæsthetic mixture is made by adding 4 parts of chloroform to 1 part of alcohol.

—*Med. News*.

## POWDER FOR ACUTE ECZEMA.

*La Semaine Médical* gives the following prescription of Alexin-ki for this condition :

R.—Oxide of zinc,	15 grains.
Subnitrate of bismuth,	30 “
Powdered starch,	1½ drachms.
Powdered lycopodium,	1½ “

This powder is to be dusted over the parts which are affected, night and morning.—*Med. News*.

## ARISTOL FOR FISSURED NIPPLES.

Vinay, in *Lyon Médical* has recommended the employment of aristol in the treatment of fissured nipples occurring during lactation. He uses it in cases in which there is much ulceration and pain. The mixture is as follows :

R.—Aristol,	1 drachm.
Liquid vasoline,	5 drachms.

This is to be applied to the breast and carefully wiped off before the child nurses. After its employment the pain diminishes and cicatrization goes on rapidly. In cases in which the glands become much involved this preparation of aristol may be rubbed into the enlargements with advantage.—*Med. News*.

## VOMITING OF PREGNANCY.

In the incoercible vomiting of pregnancy, the following is recommended by Huchard :

R. Tinct. iodini	
Chloroformis aa	..... 5 ss.

M. Sig. : Five drops, morning and evening, at meal-time in water.

CAMPOR A SOLVENT FOR IODOFORM.—Camphor increases the solubility of iodoform in alcohol and ether. While one hundred parts of alcohol ordinarily dissolves not more than one and one-fourth parts of iodoform, the same amount of a saturated solution of camphor is capable of taking up as much as ten parts.—*Cincinnati Lancet-Clinic*.

## INHALERS FOR CHLOROFORM AND METHYLENE.

The death from methylene, which we recently reported, has called forth various expressions of opinion concerning the methods of using chloroform and its ally methylene. Sir Spencer Wells has consistently advocated the employment of methylene, and has more than once indicated the way in which he believes that substance can be best administered. Methylene, whether it be a true chemical body or diluted chloroform, clearly acts very much as chloroform does, and hence must be watched and used with equal circumspection. By the employment of Junker's inhaler, especially that form recently introduced by Messrs. Krhone and Seseman, a very precise dilution of the anæsthetic can be effected. If twenty respirations are taken per minute, and two drams allowed as the quantity used in fifteen minutes, two-fifths of a minim will be evaporated for every respiration; but only one-half of this is actually inhaled, the rest being blown away during expiration. If six drams last an hour, as Sir Spencer Wells asserts, only three-tenths of a minim will, taking the average, be evaporated per respiration. The greatest quantity of the anæsthetic is, of course, required to establish initial anesthesia, very small quantities being needed to maintain the patient in that state. So that the larger dose, two-fifths, of a minim, probably represents approximately the amount of the drug inhaled at the commencement, while the smaller, three tenths of a minim, is taken at the close of the operation. For it is certain that as the layer of chloroform becomes thinner and thinner by evaporation, the quantity of vapor taken up by the air blown through it becomes less and less. The use of a funnel mask, by insuring full and free expiration, certainly enhances the value of the inhaler by increasing its safety. The fact should never be lost sight of that many of the dangers ascribed to chloroform and its congeners are in fact due to the imperfections of the methods used in their exhibition.—*London Lancet*.

## QUILL DRAINAGE TUBES.

Dr. Newell (*Medical Record*) states that Dr. Beach is using for drainage large sized goose-quills, perforated at intervals and preserved in a sublimate or carbolic acid solutions; they are said to be unirritating.

## ERYSIPELAS.

Rosenbach claims to obtain brilliant results by just washing the parts and the surrounding skin with soap and then applying each day a solution of carbolic acid (five per cent) dissolved in absolute alcohol.

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## EDITORS:

A. LAPHORN SMITH, B.A., M.D., M.R.C.S., Eng., F.O.S., London  
F. WAYLAND CAMPBELL, M.A., M.D., L.R.C.P., London.

## ASSISTANT EDITOR

ROLLO CAMPBELL, C.M., M.D.

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MONTREAL, MAY, 1891.

## APOSTOLI AND DANION.

The March number of one of our exchanges, *The International Review of Electrotherapy*, is largely taken up by a long and detailed refutation of the attacks of one Danion against Apostoli, the inventor of what is known all over the world as Apostoli's method of treating uterine fibroids by electricity. It appears that a young man named Danion, who had not long before started practice in Paris, met Apostoli, and learning that the latter had a gynecological clinic for the application of electricity, asked that he might be allowed to attend. Dr. Apostoli, who as every one who has been to his clinic will admit, is the type of the courteous and honorable physician, readily granted Danion's request, and apparently without even a thank you in return, taught him during six months, not only his whole method but a good deal of gynecology besides. He became so enthusiastic over Apostoli's method that he sent him a patient to treat, and also supported Apostoli at the reading of the thesis of Carlet before the University of Paris. Danion then started a clinic of his own where he employed Apostoli's method as he had been taught it. This was not a very generous thing to do towards his master,

but still he had a right to do it, provided always that he did his former teacher no injustice thereby. In 1889 he had so far forgotten Apostoli's generous six months' free instruction that he wrote (in the *Electrotherapy*, November, 1889), "I attended for some time the clinic of my confrere, it is true, but it was only for the purpose of discussion with him, and perhaps even Apostoli would be wrong to say that he did not derive considerable profit from the same."

In order to add insult to injury he began to attack Apostoli's method, and to maintain that the vaginal method was more effective than the intra-uterine, although Apostoli had abandoned the former on account of its inefficiency. His attacks on his former teacher became bolder and bolder until he began to heap upon him personal abuse, which during the last four years has grown worse and worse, although Apostoli had treated it with the silent contempt which it deserved. One of his latest attempts to gain notoriety may be seen from the following which appeared in the leading Paris daily newspaper *The Figaro* for 24th March, 1890: "Doubtless with former methods, based upon the intra-uterine application of high intensities, the electrical treatment, besides being extremely painful, had other serious inconveniences such as hemorrhages, scars, dangerous inflammations, &c., a series of accidents in short which are often mortal. Now, however, none of these accidents are to be feared, for Dr. Louis Danion has obtained more than six hundred cures without the shadow of an accident." This should be a sufficient sample of Danion's methods to enable the profession in Paris to attach very little importance to his claims. Indeed, it seems hard that a man with such a recognized character for honesty as Apostoli has, should be obliged to waste his valuable time in replying to such a man as his detractor, who, as far as we can learn, is only known in connection with his attempt to rob Apostoli of his honors. We can testify personally to the enthusiastic reception which Apostoli received from the eight

hundred representative gynecologists from every land who were gathered together at the ninth International Congress at Washington. We doubt if Danion would meet with any reception at all, in this country at least. We would respectfully suggest that Apostoli would best defeat Danion's object by continuing to maintain that dignified silence concerning him which he has only broken under the most harassing temptation. Let Danion's calumnies die a natural death.

### THE CAUSE OF ACUTE ARTICULAR RHEUMATISM.

A German writer whose article appears in the *Philadelphia Medical News*, 4th April, 1891, seems to have a hard time in proving that this is an infectious disease. He has had 121 cases, and although his observations correspond exactly with our own we entirely disagree in the deductions. Thus, he finds that it is most common in cold and wet weather because these meteorological conditions favor the growth of the minute organism. We find that it is most frequent in cold and wet weather, but because at such times people who are large eaters and who are accustomed to oxydise their nitrogenous food by hard labor, in fresh air, come into the crowded, ill-ventilated house and lounge around until the weather clears up. Not burning all their nitrogen into urea a large portion of it remains in the previous stage of uric acid which deposits from the blood, which is saturated with it, whenever the former is cooled below 100°, in the extremities for instance. He finds that it is rare among factory hands, notwithstanding the fact that they are poorly clad and frequently have to walk long distances in cold and wet weather and then stand long hours in wet shoes and clothing. This he attributes to the fact that they do not have to work hard and that they are away from their houses all day. We, on the contrary, would suggest that it is due to their being so badly

paid that they cannot afford to buy any more nitrogenous food than what they are fully able to convert into urea during their long walks and long hours of work. Servant girls, waiters and coachmen are very liable to it. We would suggest that these parties are all either heavy meat eaters or else they get very little fresh air or exercise to burn up completely what they do eat. Brewers and heavy beer drinkers are more liable to it because, as is well known, alcohol and malt liquors being more combustible than nitrogen have a first mortgage on all the oxygen taken into the blood, so that nitrogenous elements have to do with what oxygen is left, and if that is not sufficient for their complete oxydation then they will stop as uric acid forming sharp-pointed crystals of hardly soluble urates instead of urea. He finds that disturbances of the digestive tract precede an attack of rheumatism, which he thinks favors the disease germs. We think that the preceding dyspepsia causes acid fermentation which loads the blood with acids, causing uric acid crystals to deposit in the joints and muscles, from which it can be taken up again by rendering the blood alkaline and deluging it with water. As we have already said in a previous editorial the worst attack of rheumatism can be cut short in a few days if (1st) we cut off the supply of nitrogenous food, (2nd) render the blood alkaline with salicylate of soda and iodide of potash, and (3rd) deluge the blood with distilled or moderately pure water. We should never expect to cure a case of rheumatism on an unlimited milk diet, which was the diet in vogue when Abernethy made his famous answer to the question "What is the best cure for rheumatism?" to which he replied, "Six weeks in bed."

### CONSUMPTION IS CONTAGIOUS.

Do you, gentle reader, believe that it is? If you do not you are behind the times. If you do you can save hundreds of lives by instructing every man, woman and child

you come in contact with not to expose themselves to the contagion, and by showing consumptives themselves how to dispose of their expectoration so as to save those nearest and dearest to them from their own sad fate. We have for several years been urging this opinion on the profession, but it is no longer an opinion on which we may differ but one of the most clearly established facts in medicine. We almost blush when we think how slow the profession has been in recognizing this fact when they have so many opportunities daily of seeing its contagiousness exemplified. The only excuse we can find is the firm hold with which the doctrine of its hereditary transmission has possessed us for centuries.

### BOOK NOTICES.

**A TREATISE ON THE DISEASES OF THE NERVOUS SYSTEM.** By William A. Hammond, M. D., Surgeon-General U.S. Army (retired); late Professor of Diseases of the Mind and Nervous System in the College of Physicians and Surgeons of New York, the Bellevue Hospital Medical College, the University of the City of New York, and the New York Post-Graduate Medical School and Hospital, etc., with the collaboration of Graeme W. Hammond, M. D., Professor of Diseases of the Mind and Nervous System in the New York Post-Graduate Medical School and Hospital; Fellow of the New York Academy of Medicine; Member of the New York Neurological Society; of the American Neurological Association, etc., with one hundred and eighteen illustrations. Ninth edition, with corrections and additions. "Est quoddam prodire tenus, si non datur ultra."—Horace. New York: D. Appleton and Company, 1891. For sale by Foster, Brown & Co., 233 St. James St., Montreal. Price \$5.00.

We learn from the preface that this is the ninth edition of this valuable work which has been thoroughly revised and brought up to date by the author with the assistance of his son. The first edition was published in 1871, and since that time it has been translated into French, Italian and Spanish. Dr. Hammond enjoys a world-wide reputation as an authority on nervous diseases, and his work has for years been considered one of the standard ones. Space will only permit us to give some idea of the scope of the work as seen in the table of contents. First there is a finely illustrated chapter on the instruments and apparatus employed in the diagnosis and treatment of diseases of the nervous system, followed by a chapter on electric reactions, normal and pathological. Section I. is devoted to Diseases of the Brain; Section II. Diseases of the Spinal Cord; Section III. Diseases of the Cerebro-Spinal System; Section IV. Diseases of the Peripheral Nervous System; Section V. Diseases of the Sympathetic Nervous System; Sec-

tion VI. Certain Obscure Diseases of the Nervous System including Acute Ascending Paralysis, Myxoedema, Acromegaly, Myotonia Congenital and Symmetrical Gangrene of the Extremities; Section VII. Toxic Diseases of the Nervous System. After a careful perusal we feel safe to say that nothing that is definitely known concerning the diseases of the nervous system has been omitted. At the same time an examination of this work accentuates the impression that diseases of the nervous system and especially of that portion of it known as Great Sympathetic offers a wide field for accurate observation and investigation. Both general practitioners and specialists might all contribute something towards an accumulation of facts from which physiologists and pathologists deduce the laws which govern diseases of the nervous system. In the mean time Dr. Hammond's book is probably the best in existence on the subject.

**PLAIN TALKS ON ELECTRICITY AND BATTERIES WITH THERAPEUTIC INDEX, FOR GENERAL PRACTITIONERS AND STUDENTS OF MEDICINE.** By H. ratio R. Bigelow, M. D., Permanent Member of the American Medical Association; Fellow of the British Gynecological Society; Fellow of the American Electro-Therapeutic Association; Member of the Philadelphia Electro-Therapeutic Society; Member of the Anthropological and Biological Societies of Washington, D. C. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street, 1891.

A glance at this little book reveals the fact that Dr. Bigelow possesses the rather rare ability to envisage scientific information in such plain and simple terms that anyone can understand him. The book is exactly what it claims to be—a series of plain talks on electricity and batteries. The book is liberally illustrated so that the plain talks are made still plainer thereby.

**ELECTRICITY, ITS APPLICATION IN MEDICINE AND SURGERY. A BRIEF AND PRACTICAL EXPOSITION OF MODERN SCIENTIFIC ELECTRO-THERAPEUTICS.** By Wellington Adams, M. D., Author of "Art of Telephony—By Whom Discovered," "Evolution of the Electric Railway," "Designs and Construction of Dynamo-Electric and Electro-Dynamic Machinery." Lecturer on Electro-Therapeutics, University Medical College, Kansas City; Formerly Professor of Diseases of the Ear, Nose, and Throat, Medical Department, University of Denver, and Editor "Rocky Mountain Medical Review." Volume I. 1891, George S. Davis, Detroit, Mich. Price 25 cents.

This is one of Davis' Leisure Hour series and is a very handy and useful little book. The author truly remarks in his introductory chapter that it is no uncommon thing to see a physician dodging around with a stereotyped form of medical battery in his hand proposing to destroy hair follicles by electrolytic action through the agency of a faradic current. At the present day, and with so many books within the reach of all, there is no longer any excuse for any one making these mistakes. As the writer says, we have to thank the gynecologists for having approached the nearest to a scientific exposition of the subject. We are often asked for the name of a good book on elementary electricity and we cannot in future do better than to recommend our correspondents to purchase this one.

**THE MAN WONDERFUL IN THE HOUSE BEAUTIFUL.**

An Allegory. Teaching the Principles of Physiology and Hygiene, and the Effects of Stimulants and Narcotics. For Home Reading; also adapted as a Reader for High Schools and as a Text-book for Grammar, Intermediate, and District Schools. By Chilion B. Allen, A. M., LL. B., M. D., and Mary A. Allen, A. B., M. D., Members of the Broome County (N. Y.) Medical Society. Ninth Edition. New York: Fowler & Wells Co., Publishers, 775 Broadway, 1890.

**CONTENTS.** Part First—The House Beautiful. Chapter I, Introductory—The Human Body compared to a house; Chapter II, The Foundations—The Bones compared to the foundations of a house; Chapter III, The Walls—The Muscles described as the walls which give shape and beauty; Chapter IV, The Servants—The Muscles also act as faithful servants; Chapter V, Siding and Shingles—A description of the Skin and its appendages; Chapter VI, The Observatory—The Cranium and its contents; Chapter VII, The Hall—The Mouth, Teeth, and Salivary Glands as the Hall and attendants; Chapter VIII, The Kitchen—The Stomach, Gastric Juice, and the process of digestion described; Chapter IX, The Butler's Pantry—The Duodenum thus compared; Chapter X, The Dining-Room—The Small Intestines the Dining-room of our House Beautiful; Chapter XI, The Engine—The Heart and its workings a wonderful Engine; Chapter XII, The Housekeeper—The Blood as an industrious Housekeeper; Chapter XIII, The Laundry—The Lungs and the mystery of washing the blood described; Chapter XIV, The Furnace—The Liver as a furnace and manufactory; Chapter XV, The Mysterious Chambers—The ductless glands, as the spleen, supra-renal capsules, etc., thus denominated and described; Chapter XVI, The Telegraph—The Nerves a marvellous Telegraph; Chapter XVII, The Phonograph—The Sympathetic Nervous System compared to a Divine Phonograph; Chapter XVIII, The Burglar Alarm—The Nerves of Sensation give an alarm of danger to the House; Chapter XIX, The Sixth Sense—Muscular sense thus named; Chapter XX, The Organ—The Larynx and Vocal Chords an incomparable musical instrument; Chapter XXI, The Auditorium—A description of the External and Middle Ear; Chapter XXII, The Whispering Gallery—The Internal Ear, a marvellous Whispering Gallery; Chapter XXIII, The Windows—How the eyes serve as Windows to the House Beautiful; Chapter XXIV, The Double Telescope—How the eyes resemble a double telescope; Chapter XXV, Twin-Brother Guardians—Taste described as one of a pair of guardian brothers; Chapter XXVI, The Other of the Twin-Brothers—The Sense of Smell thus designated and described; Chapter XXVII, The Facade—How the Face and Figure show beauty, and can be compared to the facade of a house. Part Second—The Man Wonderful. Chapter I, The Baby—His Growth and development as the Man Wonderful; Chapter II, Girlhood—Its needs and requirements; Chapter III, Boyhood—Its needs and requirements; Chapter IV, Manhood—Man's ability to do; Chapter V, Doubtful Company—Tea, Coffee, Opium, and Chloral Hydrate treated of as questionable guests; Chapter VI, Bad Company—The Aboriginal American, Tobacco; Chapter VII, The Quack Doctor and Medical Assesant—Tobacco described as a tugging in these capacities; Chapter VIII, The Duke—The Cigarette described under this title; Chapter IX, The Dandy—The Cigar in this guise; Chap-

ter X, Wicked Company—Wine a quack doctor; Chapter XI, Wicked Company—Beer a Shyster, a Deceiver; Chapter XII, Wicked Company—Distilled Liquor a Thief; Chapter XIII, Wicked Company—Alcohol a Murderer; Chapter XIV, Good Company—Foods thus treated; Chapter XV, A Royal Guest—Water; Chapter XVI, The Man Wonderful.

**WOOD'S MEDICAL AND SURGICAL MONOGRAPHS.** Consisting of Original Treatises and reproductions, in English, of Books and Monographs selected from the latest literature of foreign countries, with all illustrations, etc.

**Contents:** The Modern Diagnosis of Diseases of the Stomach, by J. M. Purser, M. D., Dublin; Unsoundness of Mind, in its Legal and Medical Considerations, by J. W. Hume Williams, London; Baldness and Grayness: their Etiology, Pathology and Treatment, by Tom Robinson, M. D., London. Published monthly. Price \$10.00 a year. Single copies, \$1.00. March, 1891. New York: William Wood and Company, 1891.

**WOOD'S MEDICAL AND SURGICAL MONOGRAPHS.** Consisting of Original Treatises and Reproductions in English of Books and Monographs selected from the latest literature of foreign countries, with all illustrations, etc.

**Contents:** Treatment of Syphilis of the Nervous System, by Julius Althaus, M. D., Lond.; Railway Injuries: With Special Reference to those of the Back and Nervous System in their Medico-Legal and Clinical Aspects, by Herbert W. Page, M. A., Eng.; Causes and Prevention of Phthisis, by Arthur Ransome, M. D. Published monthly. Price \$10.00 a year; Single Copies \$1.00. April, 1891. New York: William Wood and Company, 1891. The article on the cause and prevention of Phthisis is alone worth more than the price of the whole book. Dr. Ransome has an established reputation as a reliable investigator and when he expresses an opinion on any subject we may feel safe in adopting it. He clearly proves that the disease is contagious, and he explains easily why some escape it. He also believes that those who are effected should be treated as contagious cases and is dated in special homes and hospitals accordingly. We would urge every reader to purchase at least this number of the Monographs and to study carefully Dr. Ransome's article. Besides, the articles by Dr. Althaus and Mr. Page are exceedingly interesting.

**THE SHURLY-GIBBES TREATMENT OF TUBERCULOSIS.** By E. Fletcher Ingals, A. M., M. D., Professor of Laryngology, Rush Medical College; Professor of Diseases of Chest and Throat, Woman's Medical College, and John Edwin Rhodes, A. M., M. D., Professor of Diseases of Chest and Throat Clinic, Women's Medical College. With Discussion. Read before the Chicago Medical Society, of Chicago, March 2, 1891. Reprinted from the *Chicago Medical Record*, Chicago, April, 1891. Press of R. R. McCabe & Co., 144 Monroe St.

**PEPSIN.** A Review of the Pepsin Question. By Dr. Carl Friedrich Witte. Dr. Friedr. Witte's Chemical Laboratory, Rostock, Germany. Reprint from "Notes on New Remedies," issues of February and March, 1891. New York, 1891.

**HYPERTROPHY OF THE PHARYNGEAL TONSIL.** A Clinical Lecture Delivered at the Rush Medical College, October 30, 1890. By E. Fletcher Ingalls, A. M., M. D., Professor of Laryngology in the Rush Medical College, and of Diseases of the Throat and Chest in the Woman's Medical College of Chicago, etc. From the Medical News, March, 1891.

**HOW SHOULD GIRLS BE EDUCATED.** A Public Health Problem for Mothers, Educators, and Physicians. By William Warren Potter, M. D., of Buffalo. The Anniversary Address of the President Delivered at the Eighty-Fifth Annual Meeting of the Medical Society of the State of New York. Philadelphia: Wm. J. Dornan, Printer, 1891.

### LITERARY NOTES.

*The Journal of Gynecology* is the title of a new, monthly whose initial number was issued in April and will be devoted to gynecology, obstetrics and abdominal surgery. It is to consist of forty-eight pages and, in addition to original articles, there will be society proceedings, selections, abstracts and a bibliographical index of the articles appearing in American medical journals relating to the subjects noted above. Dr. Charles M. Smith, of Toledo, Ohio, is the editor of this publication, which we hope will be a success.

*The Journal of Comparative Neurology* is to be a new quarterly, nominally, as fasciculi will be issued at more frequent intervals whenever material is ready. Each volume will contain 500 pages, the price being \$3.00 per annum, or \$2.50 if paid in advance. As its name indicates it will be devoted to the comparative study of the nervous system. The announcement we have received is signed by C. L. Herrick, of the University of Cincinnati.

*The International Clinics* is the title of a quarterly octavo of 300 pages to be issued by the Lippincotts, of Philadelphia, very shortly. They will contain clinical lectures of English and American teachers, the subjects embraced being medicine, surgery, gynecology, pediatrics, neurology, dermatology, ophthalmology, laryngology, and otology. The American editors are Drs. John M. Keating and J. P. Crozer Griffith, of Philadelphia, and W. J. Mitchell Bruce and David Finlay, of London.

### NEWS ITEMS.

**THE AMERICAN ACADEMY OF MEDICINE.** A Brief Statement of its Objects.—The American Academy of Medicine is a society founded in 1876, composed of physicians of at least three years' experience in the practice of medicine, who previous to entering upon the study of medicine, pursued a systematic course of study in some collegiate or scientific school and received therefrom the degree of Bachelor of Arts or its equivalent.

Its objects are practical and have in view the general welfare of our profession, as well as of society at large.

It aims to bring into closer relations the educated members of the medical profession who are alive to the importance of systematic mental culture, as a preparation for the study and practice of medicine.

It hopes, through the association of all educated physicians, to utilize for the good of humanity that latent power of the individuals, which is only potent when combined and organized.

It aims to wield the combined moral and intellectual force of the members of the profession thus organized, as an instrument with which to create, mould and control the sentiment and policy of the whole profession, and so ultimately of the whole community, until it shall be impossible for anyone, without adequate preliminary education, to enter upon the study of medicine.

It is the aim of the Association to aid and encourage progressive medical schools to adopt yet higher standards in their preliminary requirements and in the curriculum of medical study; to urge forward by the motive of self preservation those who are lagging and unwilling, and to starve out those who are hopelessly intractable and will not adapt their methods to the advanced requirements of the age.

It hopes by this course to elevate the medical profession to a higher plane than it has ever occupied, so that with its members more carefully selected, more thoroughly equipped and more perfectly united and organized, it shall be enabled, as never before, to successfully meet the problems of the nature, prevention and cure of disease, not only as related to the individual, but the race as a whole.

We confidently look for the hearty sympathy and co-operation of every intelligent, educated and public-spirited member of the medical profession, in our efforts to achieve these ends.

We earnestly hope that every physician who is eligible to Fellowship, to whom this circular is sent, will, without delay, fill out the enclosed blank application for membership, and send it, properly endorsed, either to the Secretary of the Academy or to Dr. Justin E. Emerson, the Chairman of the "Committee on Eligible Fellows," 128 Henry St., Detroit, Michigan.

### PILOCARPINE IN DRYNESS OF THE TONGUE.

Extreme dryness of the tongue is frequently a distressing symptom which does not yield to treatment whilst the concomitant cause remains in operation. The sucking of ice, or sipping of bland fluids gives but temporary and inadequate relief, and the same may be said of glycine as a pint. In this condition Dr. Blackman (*American Journal of Medical Sciences*) has used one twentieth of a grain of pilocarpine as a gelatin lamel allowed to dissolve on the tongue previously moistened by a sip of water. This dose quickly establishes a moderate flow of saliva, which persists for at least twenty-four hours, and is not accompanied by excessive perspiration.—*Lancet-Clinic*.



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## Society Proceedings.

### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

*Stated Meeting, February 20th, 1891.*

F. J. SHEPHERD, M. D., PRESIDENT, IN THE CHAIR.

*Perforated Vermiform Appendix.*—Dr. Shepherd exhibited this specimen, which he had removed from a patient aged 29. A portion of the wall of the appendix had sloughed, causing a perforation, through which protruded a concretion the size of a white bean. The patient, three days before the operation, had been seized with sudden pain, vomiting, and tenderness in right iliac fossa. The appendix was found without difficulty in a pus cavity. The patient made a rapid and uninterrupted recovery.

Dr. MacDonnell had seen the patient previous to operation. This disease, which formerly had been so rarely met with, was now quite frequent. He considered the hardness of the abdominal parietes, particularly on the affected side, one of the most characteristic features. He had noticed that the symptoms frequently improved after the first shock was over, and, notwithstanding that the character of the symptoms in many cases was that of general peritonitis, the lesion was local. This he had corroborated in three cases, two after operation and one at the autopsy. In one case of interest which he now had under observation, the pulse remained low and the abdominal symptoms improved whilst the temperature was increasing.

Dr. Buller referred to the relative frequency of appendicitis amongst the Germans, which Virchow had attributed to their larger consump-

tion of vegetable food, which dilated the appendix.

Dr. Shepherd remarked that the only animals possessed of an appendix were the higher apes, the wombat, and man.

*Comparative Pathology.*—Dr. Shepherd showed the skeleton of a parrot with a fracture of the left femur, which had produced much shortening of the limb. The right side of the pelvis was well developed, but the left was atrophied, in consequence, no doubt, of the disease of the muscles of that side caused by the shortened limb.

*Chronic Pyosalpinx.*—Dr. H. D. Hamilton exhibited the specimen. The pelvic organs were found matted together by old adhesions, and were adherent to the abdominal parietes on the left side. The left ovary contained a multilocular cyst about the size of an orange; from the left cornua of the uterus extended a winding sinus which communicated with the rectum. The patient was 26 years of age; married at 17, and had up to that time been in good health. She was taken very ill shortly afterwards with considerable pain in the left side of the abdomen, which invalidated her for six months. She was never afterwards absolutely free from pain in the left inguinal region, and subject, at long intervals, to acute exacerbations. The patient was operated on, in the Western Hospital, in 1885. On 1st January, '91, she was admitted to the General Hospital under Dr. Molson. She was then in a very weak condition, and complained of considerable abdominal pain. Erysipelas of the face appeared the second day after her admission, which subsided on the seventh day. The patient died on the thirteenth day with uræmic symptoms.

*Puerperal Septicæmia.*—Dr. Johnston exhibited the uterus from a patient who had died two months after confinement with symptoms of

puerperal septicæmia. There was chronic proliferative endometritis. A pelvic abscess was found outside the peritoneum on the left side, chiefly about the left common iliac vein, which showed septic thrombo-phlebitis with extension of thrombus to the vena cava. There was also multiple embolic pneumonia of the right lung, with septic fibrino-purulent pleurisy on the right side.

Dr. Gardner, who had examined the patient shortly after her admission to the hospital, discovered the uterus displaced backwards, and somewhat limited in its movements, with slight tension of the left broad ligament. The temperature was decidedly septic, though no signs of pus could be discovered anywhere. There was no pain, tenderness, or abdominal distension. A careful examination of the external parts of the pelvis, the various foramina and orifices through which pus could burrow, had been made. As there was nothing to guide the introduction of instruments, he had not thought it justifiable to operate.

Dr. Shepherd thought that surgical interference in such a case would probably be of no avail.

*Tubercular Testes.*—Dr. Johnston showed, for Dr. Jas. Bell, two specimens of tubercular testes which had been removed from patients subsequent to the treatment of injections of tuberculin. The first testicle exhibited was small. There was an abscess the size of a bean in the epididymis, and the vas deferens and tunica vaginalis were thickened. The disease was confined to the epididymis and the spermatic cord, the body of the testis being free from disease. In the second specimen, the testicle was considerably enlarged; great thickening of the tunica vaginalis and of the cellular tissue about the epididymis. The whole of the epididymis was transformed into a continuous mass. Some firm, greyish-white, opaque, miliary tubercles were scattered throughout the body of the testis—about a dozen being seen on a cut surface. There was no appearance of hyperæmia or diffuse infiltration about these. Both organs showed nothing unusual which could be attributed to the action of the tuberculin.

Dr. Jas. Bell remarked that he had reported to the Society the result of the treatment in the first of these cases four weeks ago. Since then, the patient had been given three injections with the usual reaction. The last injection was on Feb. 15th, which was followed by pain in the epididymus at the lower part of the right testicle, which subsided with the fever. This patient had also been the subject of tubercular ulcerations of the bladder (*vide* report of Jan. 23rd, Case No. 4). The patient from whom the second specimen had been removed had received but two injections, which produced a severe reaction in the diseased organ, considerable heat and pain. The presence of the miliary tubercles he did not

attribute to the lymph, but to the active condition going on previous to its use.

Dr. Roddick asked if any effect was produced on the bladder in the first case referred to.

Dr. G. T. Ross inquired if there was any disease in the lungs in these cases.

Dr. Bell replied that the bladder disease had existed for five years, but that the patient had been entirely relieved from acute symptoms since October 2nd, 1890. No pus or change in the urine had been noticed after the injection. There was no trace of tubercular disease in the lungs. This patient (the first one) had received eight injections before any reaction appeared in the right testicle.

*Sarcoma of the Testis.*—Dr. Roddick, who exhibited the specimen, remarked that the patient, a man aged 40, had first noticed swelling in the scrotum nearly two years ago. Hydrocele had persisted throughout the case, for which the scrotum had been tapped nine times, and once injected with iodine. When he came under examination, a tumor, in the left side of the scrotum, could be felt through the fluid—a hard, oval shaped mass, with a nodular feel, producing no tenderness on pressure. There was no implication of the cord. The tumor had all the appearances of a chronic sarcocele. There was no history of syphilis or cancer. It having been decided to operate, Dr. Roddick, on cutting down found the cord soft, yielding and not enlarged. There was an enormous hydrocele. The testicle proved to be sarcomatous. The whole of the diseased mass was removed.

Dr. Johnston, who reported upon the pathological appearances, remarked that the testicle was about the size of a small apple. There were extensive adhesions and thickening about the tunica vaginalis. In the epididymis, a firm, caseous mass as large as a cherry was shown, with smaller masses in the neighborhood, evidently old inflammatory deposits. In the body of the testis, near the lower extremity, was a soft, smooth, medullary-looking tumor, pinkish-gray in color, its borders made out with difficulty. The cut surface was smooth, and yielded, when scraped, a grayish turbid juice, which, under the microscope, showed large round cells lying within large spaces, with a delicate fibrillated structure surrounding each individual cell. The vas deferens was not involved. Diagnosis: alveolar (large round cell) sarcoma.

*Carcinoma of the Breast.*—Dr. Roddick related the following clinical history: The patient a young woman, aged 27, single, had come to the hospital complaining of a hard lump in her left breast. She had had typhoid fever two years ago; with this exception, her health had always been good. There was no history of cancer in the family. The mother probably had had lupus. No history of injury. The patient first noticed the lump in her breast two years ago, which had slowly increased in size during the past two

months. A little pain had been felt in the tumor, but not lancinating in character. On examination, a tumor was felt, somewhat circular in outline, with a diameter of about three inches. It was situated with its lower border just above the nipple, and between it and the sternal end of the clavicle. It was not painful on handling, and felt firm and somewhat nodular, giving an impression of hardened gland tissue. The tumor was freely movable over the subjacent tissues, not attached to the skin, and the nipple not retracted. From these signs and the age of the patient, it appeared more, as Dr. Roddick remarked, like an adenoma-fibroma, or an adenoma-sarcoma. At the operation, on cutting into the tumor, it was so evidently malignant that the whole breast was removed. Several glands in the axilla which were found slightly enlarged were also removed.

Dr. Shepherd had examined the patient previous to the operation, and had also thought it a benign growth, though suspicious of some enlarged glands in the axilla. He had seen one case of carcinoma in as young a patient. He believed that all tumors of the breast should be removed in young or old.

*Urinary Calculi.*—Dr. Roddick exhibited two calculi removed from a man aged 71. Owing to the patient's age, he had selected the lateral operation in preference to the supra-pubic. The perineum was very deep, which made it somewhat difficult to reach the bladder. The large stone weighed four drachms and thirty-eight grains, the smaller sixteen grains. Symptoms of stone had existed for one year only.

*Enlarged Bursæ.*—Dr. Bell brought before the Society a man aged 38, farmer, with enlarged bursæ in each ham, beneath the inner head of of the gastrocnemius. These had been aspirated several times without benefit. Dr. Bell had made an exploratory incision with the intention of removing the bursæ, if practicable. He found that these had a direct communication with the knee joint, and appeared somewhat like a hernia of the synovial membrane of that joint.

Dr. Shepherd considered a dissection of the bursæ in these cases very difficult, with possibly no good result.

*Glycosuria.*—Dr. J. H. B. Allen read a report of a case of glycosuria.

Dr. Jas. Stewart asked if the knee-jerk had been tested, and if any paresis, had been noticed. He thought the case one of multiple neuritis, which may occur with glycosuria.

*Molluscum Fibrosum.*—Dr. Bell showed to the Society a case of molluscum fibrosum which had followed a peculiar course. The patient had developed sarcoma of the sciatic nerve, which was removed last December, but recurred; and the limb was amputated three weeks ago. Such cases were very rare; two only were mentioned in *Virchow's Archives*. Dr. Bell had met with three cases within two and a half years.

*The Diagnosis and Treatment of Epilepsy.*—Dr. Jas. Stewart read an interesting paper on this subject.

*Stated Meeting, 6th March, 1891.*

F. J. SHEPHERD, M.D., PRESIDENT, IN THE CHAIR.

*Notes on the Insane and their Treatment.*—Dr. Wesley Mills read a paper of interest on the above subject.

*The Diagnosis and Treatment of Epilepsy.*—Dr. James Stewart gave a synopsis of his paper read at the previous meeting of the Society.

*Discussion.*—Dr. Laphorn Smith had noticed a loss of will power in epileptics, in whom slight irritation produced fits. He narrated the case of a woman, an epileptic, with dyspeptic symptoms, who had considerably improved upon suitable diet. In the medicinal treatment of epilepsy, he used bromide of sodium in preference to bromide of potassium, as being less irritating, and less apt to produce acene. He considered hysterio-epilepsy a modification of epilepsy.

Dr. Alloway, referring to the application of forceps to the head in difficult cases as a factor in the production of epilepsy, thought the results now obtained by the Caesarian operation worthy of consideration; besides, avoiding the great liability of injury to the pelvic floor and the danger to the child. By the Sanger-Leopold methods of operating, the mortality had been reduced to five per cent. Dr. Kelly, of Baltimore, had had four cases of Caesarian section with good results.

Dr. Armstrong wished to know if there were any statistics to prove that the majority of epileptics among children, apart from heredity, was found amongst those who had been delivered by forceps. He considered this of importance to the general practitioner. He had knowledge of two cases of epilepsy in children on whom forceps had been used. One, 3½ years of age, had died a short time ago from pneumonia. The post-mortem, performed by Dr. Johnston, failed to reveal any signs of injury which could be attributed to the forceps. The skull, membranes and brain appeared normal. He considered Caesarian section too severe and dangerous an operation to adopt in such cases where forceps could be used.

Dr. McConnell believed that both cases of epilepsy could be traced to some reflex irritation. By some, the cause was believed to exist in an ocular defect. He asked if it were not possible, in all cases of epilepsy, to find some cause of irritation, which, if removed, would bring about a cure, without the use of bromides.

Dr. Foley considered that diet was more important than bromides in the treatment of epilepsy.

Dr. Jas. Stewart, in his reply, in answer to

Dr. Smith, remarked that, with regard to the beneficial action of the different bromides, it was practically of little difference which was used, as they were all converted into sodium bromide. Some bromides, however, were more irritating than others. The production of acne was not due to any particular salt used, but to the decomposition of the bromide and the elimination of the bromine. In reply to Dr. Armstrong, he had mentioned the forceps as one of the rarer exciting causes of epilepsy. Sometimes the slightest injury, without effecting any gross change, produced a molecular disturbance which was sufficient to cause epilepsy. Dr. Stewart referred to the interesting nature of Dr. Mills' paper and the good results that were being obtained by the line of treatment advocated.

Dr. Mills based treatment on causation. He attached much importance to afferent impulses. Taking as a unity the nerve cell with its afferent and efferent nerves, we get what exists in all complicated organisms. These are subject to disturbance whether produced by disease or not. A brain may be perfectly normal as far as the eye or the microscope can detect, and yet be abnormal. Dr. Mills referred to the instability of the nerve cells mentioned by Dr. Stewart. When tired, the nerve cell became irritable, which called for rest. He believed that ingoing impulses modified outgoing impulses. So in treating the insane we should alter the environments, give good food, and prescribe rest. He considered the drill exercises excellent. It sets energy off and cultivates the will.

Dr. Duquet agreed with Dr. Mills in the treatment of the insane. It was not by the use of drugs that the greatest progress was to be made, but by suitable amusement and employment. He believed that the curable should be separated from the incurable. He praised the system of housing the insane practiced in Basle, and since adopted in Ogdensburg, N. Y. Three separate buildings were erected—a hospital for curable cases, an asylum for chronic cases, and an infirmary for the weak-minded.

Dr. Alloway exhibited the following pathological specimens:

(1) *A Small Ovarian Cystoma and Hydrosalpinx of Left Side; Hematosalpinx with Cystic Ovary of Right Side.*—The subject of this specimen was referred to him by Dr. Buller. She complained of asthenopia, no organic disease of the eye existing. She was referred to him for examination of pelvic organs. Under ether, considerable enlargement of the left ovary was detected, but nothing abnormal was apparent on the right side. The specimens exhibited showed how much disease of this nature could exist with so few subjective symptoms. The patient, now nine months since the operation, writes to say that her eyesight is sufficiently improved to allow her to read and do needlework, and that her general health has been quite restored.

(2) *A large Interstitial Fibro-myoma with Necrotic Centre.*—This patient was 50 years of age, and suffering, when brought to Dr. Alloway, from septicæmia. She was bloodless, high temperature, rapid pulse, unable to stand from exhaustion, and, generally speaking, in a dying condition. Had spent the past two years off and on in foreign hospitals for the relief of menorrhagia. Examination revealed a large myomatous mass about the size of a child's head at term, occupying the vagina. At its lower extremity was an opening leading to a necrotic centre with intensely fetid discharge. Urine was albuminous with fatty and granular casts. Loud cardiac bruit with dilatation. Dr. Alloway stated that at first he refused to operate under these unfavorable circumstances, but was eventually importuned by the relatives of the patient to give her a chance of recovery by removal of the tumor. The operation was completed as rapidly as possible, piece-meal, by the scissors and vulsellum. Very little blood was lost, but she died comatose twenty hours after the operation. There was complete suppression of urine during this time.

(3) *Small Pedunculated Myoma.*—This patient was unmarried, aged 37; suffered from menorrhagia during the past three months. The small growth was twisted off with the vulsellum. The cavity of the uterus was dilated, thoroughly curetted with a sharp instrument, and packed with iodoform gauze. Patient left hospital in three weeks, restored to health.

*Tuberculosis of the Knee.*—Dr. James Bell exhibited a specimen of the synovial membrane from a case of tuberculosis of the knee in a child. The patient had previously been treated with injections of tuberculin. On opening the joint two suppurating points were noticed, one on each side. There was a good deal more hyperæmia, and the tissues were much more fragile than is usually seen in such cases, and separated more easily from the surrounding tissues.

Dr. Johnston reported that the pus was more like muco-pus, probably due to an admixture with synovial fluid. It contained no tubercle bacilli, nor were there any micrococci, which was unusual when pus was found. The gelatinous changes were well marked. There was no eruption of milium tubercles.

*Stated Meeting, March 20th, 1891.*

F. J. SHEPHERD, PRESIDENT, IN THE CHAIR

*Thrombosis of the Portal Vein.*—Dr. J. A. Springle exhibited this specimen from a patient, aged 30, who had died with symptoms of peritonitis. There had been ascites and hæmatemesis. At the autopsy was found an extensive adhesive peritonitis. The hepatic artery was considerably dilated, and its walls thickened. The portal vein appeared as a flattened fibrous cord about the thickness of a slate pencil, sending fibrous

branches to the under surface of the liver. The condition seems to have been a thrombosis at the junction of the superior mesenteric and splenic veins from peritonitis. Dr. Springle would report the case in full at a later date.

*Appendicitis, Abscess of Pancreas and Liver, and Phlebitis.*—Dr. G. E. Armstrong, who exhibited these specimens, remarked that the patient a young man aged 35, had first complained of abdominal pain one year ago, which had lasted but a few hours. On the 31st January he suffered from a second attack, which disappeared without any ill effects, when on the 2nd March he had a third and more severe attack. The temperature, which, shortly after the onset, had fallen to normal, rose again for the following ten days. There was no abdominal distention, no difference in outline, and pressure was well borne. The symptoms became severe on the twenty-fifth day of his illness, when Dr. Armstrong, assisted by Drs. Roddick and Perrigo, operated. The appendix, containing one drachm of pus, was removed. There was nothing of a visible. The symptoms became worse, and the patient died the third day after the operation. At the post-mortem was found what he believed to be the cause of the pyæmic condition. The lower border of the omentum had become adherent to the anterior wall of the abdomen, near the pelvis, and was gangrenous. A septic phlebitis had thus extended along the mesenteric veins up the portal and splenic veins to the liver and the spleen. Metastatic abscesses were found in both the liver and the pancreas. He had had a similar case ten years ago.

*Appendicitis.*—Dr. G. E. Armstrong also exhibited a second specimen of appendicitis. The appendix, in this case, had been removed seventy hours after the onset of the symptoms which had been typical of the disease. At the operation one pint of pus was removed, and the whole of that side of the abdomen thoroughly washed out and drained. The operation failed to relieve the patient. The post-mortem showed extensive septic inflammation of both the visceral and the parietal layer of the peritoneum. There was no perforation or strangulation. Although the operation here had been performed early, the cavity thoroughly cleansed and free drainage provided, it had, nevertheless, proved unsuccessful.

Dr. Laphorn Smith remarked that it was difficult to know, in cases of appendicitis, when to operate and when not to operate. He asked the probable cause of the gangrene of the omentum, and whether Dr. Armstrong was in favor of the median or lateral operation.

Dr. Geo. Ross said that the existence of the great danger from septicæmia and pyæmia from appendicitis was well recognized. Pyelo-phlebitis septicæmia and pyæmia frequently occurred from the absorption of purulent matter into the veins. He did not see how we would be justified in

attributing the chief cause of pyæmia, in the case mentioned, to an adhesion to a structure surrounding a sloughing appendix.

Dr. Shepherd explained the sudden disappearance of symptoms in cases of appendicitis, such as acute abdominal pain and vomiting, by the pus which got into the appendix possibly getting back into the intestine. Many cases of appendicitis, he believed, were fatal from the first.

Dr. Armstrong, replying, remarked that the site of the incision he selected depended upon the case,—the lateral when the disease was localized; the median when the affection had already extended. He believed that recurring cases should be operated on. In the two cases which he had met with of appendicitis with pyelo-phlebitis, there had been an adhesion of the omentum at the site of the sloughing appendix, which led him to think that this condition had had something to do in the causation.

*The Koch Treatment of Tuberculosis.*—Dr. McConnell read, at some length, a paper on the above subject, giving a report of the cases he had witnessed treated in the Berlin hospitals. He referred particularly to the cases of tuberculosis of the lungs.

Dr. Roddick stated that the treatment had been discontinued in the Montreal General Hospital. In surgical cases the reaction had proved too violent and sometimes disastrous. He mentioned the case of a child with tuberculous disease of the ankle-joint, limited to the outer part of the tarsus, in whom, after three injections of tuberculin, rapid destruction of the bones had occurred, showing the great necessity for caution.

## THE TREATMENT OF FURUNCLES.

Dr. Veil (Monatsh. f. prakt. Dermatolog.) states that the object of treatment in furunculosis should be, 1st, to destroy the micrococci, which have penetrated the skin, by parasticides; 2nd, to hasten the detachment of the necrotic portions; 3d, to prevent the formation of new furuncles by infection through pyogenic cocci escaping from the suppurating furuncles; 4th, to prevent as far as possible the invasion of the body by pyogenic organisms. The first indication cannot be readily accomplished unless the antiseptic is injected directly into the purulent centers. The second is best fulfilled by the old method of poulticing. At night we may apply a paste consisting of zinc oxide, vaseline and four per cent. of boracic acid. It is injurious to press out the contents at an early period. The third indication is fulfilled by rubbing in the paste three times daily, together with sublimate baths. The patient should be put on a nourishing diet; the administration of arsenic, however, is of no value.—*Wiener Medizinische Wochenschrift.*—*Medical Herald.*

## Progress of Science.

### NEURALGIA AND ITS TREATMENT.\*

By R. E. M'Vey, M. D., of Topeka, Professor of Clinical Medicine in Kansas Medical College.

In considering the treatment of neuralgia the subject will be confined to what may be regarded as the curable forms of the disease, leaving out the question of organic affections of the brain and spinal chord, and the neuralgias caused from periosteal and osteal diseases and from tumors.

In the treatment of any disease some knowledge of its pathology and general behavior is necessary for the intelligent guidance of the physician. The pathological lesion of a neuralgia may be both central and peripheral. The sensory nervous filaments originate in the grey substance of the nervous centers and terminate in the sensitive membranes of the periphery. The neurilemma of the nerve trunks are penetrated by blood vessels, for their nutrition.

Neuralgic diseases may be regarded as the result of trophic and circulatory changes brought on by an exhausted condition of some part of the nervous system. Exhaustion in the nervous centers may be produced by overpowering mental influences or by sexual excesses and by whatever overtaxes the nervous energies.

In the long continued and intractable forms of the disease, it may be assumed that there are atrophic changes in the central cells of the grey matter in the posterior columns. If the central cells in the posterior columns are subject to long and protracted excitation their receptive faculties undergo alterations, by which ordinary sensations are grossly exaggerated, and normal stimuli may be received and transmitted in such a way as to cause pain, which is referred to the peripheral terminations of the nerves. When the heart is exhausted its action is quickened, as in an exhaustion of the cells of the posterior columns, their molecular action is enfeebled and with enfeebled action in the cells there will be electrical disturbances in the nerve centers, which will be manifested as a hyperæsthesia of the peripheral terminations.

In disturbed electrical conditions of an exhausted center, altered electrical currents will traverse the nerve, sometimes producing coarse stabbing pains, those coarse pains, temporarily overcoming the sensibility of the nerve filament, and we have in the affected nerve, hyperæsthesia alternating with anesthesia.

Pains produced in every portion of the nerve filaments are referred to their terminations, but the central cells in the grey matter of the cord

are the receivers of sensations, painful or otherwise. This fact is well illustrated in amputation of the leg. When the stump of the divided nerve is irritated, the disturbance is referred by the patient to the foot or toes, the central cells not correcting the error until either the sense of the sight or touch is brought into requisition. In obstinate and protracted neuralgias of the fifth pair, painful branches distributed to the face have been divided, without any permanent benefit to the sufferer, showing the disease to be central. After the removal of the ovaries for ovarian neuralgia, when caused from excessive sexual excitement the disease often returns after the operation when the marital relations are re-established, the disease not being in the ovaries but in the central cells of the cord. The nerve trunks are subject to vaso motor disturbances, from central causes, which either constrict or dilate their blood vessels.

If there is insufficient blood in the nervous centers, there will be irritability with functional disturbances in the organs of the body, which are called upon to perform some extra exertion. The blood may be sufficient in quantity but deficient in quality or contain foreign elements, specific poisons, as malaria or syphilis or the poison of rheumatism and gout, either of which cause neuralgic pains in the branches of the fifth pair, which are distributed to the face. Neuralgias of the lumbar region and of the sciatic nerve are often found to be of rheumatic origin.

In the peripheral forms of neuralgia, the blood supply of the terminal sensory filaments are affected by sudden lowering of the temperature, either alone or accompanied by dampness, which chills and depresses the capillary circulation in the exposed parts. The terminal sensory filaments are affected by alterations in blood supply, by vascular constrictions they are rendered anæmic and by vascular dilations, hyperæmic. A man lies at night with one side of his chest exposed to a cold draft of air from an open window, the next day he finds he has a pleurodynia. The surface vessels of that side of the chest have been chilled. There is diminished blood supply in the parts, and pain has been produced as a result.

*Treatment.*—Local pains are best treated by hypodermic medication, this treatment being quick and certain. The introduction of medicine hypodermically, may be done safely if the needles and syringe be kept aseptic.

By the use of hypodermic medication we know exactly the amount that reaches the tissues and circulatory system. Neuralgic patients who have taken large doses of narcotics, without benefit, are sometimes cured by a few hypodermic injections of appropriate medicines. The injections should be made in the tissues surrounding the affected nerve.

But it is not necessary to make the injection

\*Read before the Topeka Academy of Medicine and Surgery, at Topeka, Kansas, October 7, 1890.

over the diseased point if there are indications of inflammations resulting from previous injections. Timid patients who refuse to be treated hypodermically, can be relieved often by the local application to the affected parts of:

Morphia acetate,	grains $\frac{1}{2}$ .
Spts. chloroform,	drams $\frac{1}{4}$ .

Which should be put on antiseptic cotton and covered with oiled silk. For hypodermic treatment the sulph. morphia, grains  $\frac{1}{2}$ , and the sulph. atropia, grains 1.60, are therapeutical agents, which have long been in use and have proved efficient remedies in controlling neuralgic pain.

In visceral neuralgia the tr. nux vomica is indicated, as in gastralgia and hepatalgia. The tr. gelsemium is a most valuable remedy in neuralgia of the face. It should be given in small doses, not above four drops every four hours. Croton chloral is efficient in the *douloureux* and sciatica. Two grains may be given every hour until fifteen grains have been given. If atrophic changes in the central cells are suspected strychnia in very small doses, 1-100 of a grain may be given twice daily.

If there are atrophic alterations in the terminal filaments the

Alkaloid strychnia	grains 1
Spts. chloroform	ounces $\frac{1}{2}$

may be rubbed over the anæsthetic surfaces, twenty-five drops at a time, and the parts then covered with oiled silk.

A five per cent solution of the hydrochlorate of cocaine may be applied locally over the sensitive foci in facial neuralgia, and its absorption promoted by a compress saturated with chloroform.

The positive galvanic sponge electrode saturated with a five per cent. solution of cocaine and applied over the painful surface will often give relief. Dr. Richardson was the first to recommend the induction of anæsthesia by the use of a chemical in conjunction with the galvanic current. As the retention of the medicine in the affected parts is of great advantage in holding the pain in check, bandages should be applied over the affected parts for this purpose.

In the treatment of long continued cases of neuralgia, the hydrochlorate of cocaine should be used in small doses. Dr. Corning injected hypodermically a solution of one half of one per cent. to the amount of one hundred minims in sciatica, along the course of the nerve, which relieved the pain from twelve to twenty-four hours, it being repeated if the pain returned. He retained the medicine in the tissues by means of a tourniquet applied near Poupart's ligament. In spondylalgia, Dr. Corning uses a fine needle about three inches in length, provided with a handle and a sliding nut, which may be fixed at any portion of the needle by means of a screw. This needle he thrusts down about half

an inch laterally, from the spinous process of the tenth dorsal vertebra, until the bone is reached. The nut is then pushed till it rests upon the skin, when it is secured by means of the screw. He then introduces a fine canula, with a sliding nut, to the distance previously noted on the needle. A hollow needle is then attached to a syringe of one hundred minims capacity. The syringe is filled with one-half of one per cent. solution of cocaine and emptied deep into the tissues over the cord. In the constitutional treatment of neuralgia a knowledge of the family history, showing the nervous tendencies, is necessary.

We can not build a substantial structure with a faulty foundation. Where the nucleus of the cell is faulty and unstable in its functions little can be done toward its permanent restoration. Where there is faulty cell function, there will be alteration in the blood, secretions, absorption, assimilation and nutrition. Deficiencies found in the blood are effects instead of causes and exist previous to the local pains of neuralgia.

Medicines cure the affection chiefly by influences which cause the food to be transformed into healthy blood. In the central forms of neuralgia with atrophic change, quinine heads the list of restorative remedies. It should be given in small doses as it should be continued for a considerable length of time. It increases the blood supply of the central cells of the cord.

Antipyrin is a doubtful remedy only in neuralgias of rheumatic origin. It quiets pain through its analgesic effect. Fifteen grain doses are generally sufficient for neuralgias of rheumatic origin, as in lumbago, sciatica and the supra orbital affection.

Phenacetine may be used in neuralgia due to malaria, vaso motor disturbances and neurasthenia. The dose is from five to seven grains repeated from four to six times a day. Phenacetine may also be used hypodermically.

Iron and arsenious acid favor the transformation of food into blood and improve nutrition in the nervous centers.

Patients subject to neuralgia should eat food easily digested and assimilated and which contains iron, phosphorus or whatever substance is deficient.

Malarial and syphilitic neuralgia require specific treatment. In neuralgia of malarial origin, the sulph. of quinine is indicated and should be given in large doses and repeated until the pain is relieved, when prophylactic doses may be continued for some length of time.

In syphilitic neuralgia, the biniodide of mercury is a specific. The iodide of potassium also affords relief by antagonizing the syphilitic poison.

Reflex neuralgias may be controlled by the



sedative action of cocaine, over the central nervous system, administered internally.

There are various preparations made by the manufacturing pharmacists for internal use. One of these, a cordial prepared by Parke, Davis & Co., contains 60 grains of coca leaves to the ounce and the dose is from two to four fluid drams. This cordial represents the drug in a palatable form, commending it especially for the large class of persons of delicate nervous organizations. In small doses cocaine is a cerebral stimulant, it increases the pulse and respiration and raises the body temperature.

Phosphorus is a nutrient to the nervous system and in all cases of chronic nerve exhaustion it is of great value. As neuralgia is an expression of exhausted nerve power and lowered vitality, the oleum phosphoratum, containing one per cent., may be given in doses of from one to two minims, or in official pills, one one-hundredth of a grain each. In centric tic the drug has given very decided relief.

In the young cod liver oil is indispensable. It is easily digested and readily assimilated, a medicine which improves nutrition and supplies deficiencies of the blood.

In all cases of neuralgia hyper-nutrition is the best treatment. It should be the first and the last. Exposure and exhaustion either mental or physical, must be avoided.

There is nothing better for a man than that he should eat and drink and that he should make his soul enjoy good in his labor.—*Kansas Medical Journal*.

#### PAPAIN: THE VEGETABLE PEPSIN—ITS ORIGIN, PROPERTIES, AND USES.

It is one of the concomitants of the advance of human civilization, and perhaps a form of the Nemesis that follows man's neglect of nature's dictates, that as his power over the material increases and as he accumulates wealth and knowledge his physical being tends to undergo a kind of retrogression, and becomes less able to bear the strain imposed upon it by an active and almost unwearying intellect.

Thus it is that one of the characteristic features of the age is the number and variety of the devices for remedying the effect alluded to, sought after and introduced, prominent among which must be classed the ever increasing array of preparations for facilitating digestion, and remedying the evils resulting from confused and sedentary habits of life, combined with hurried and unnatural systems of supplying the severely taxed frame with nutriment.

Of artificial digestive agents few have been more conspicuous than the pepsins, which being natural peptonising substances, are apparently most suited to enhance the functional activity of an enfeebled stomach. It is, however, well

recognized that pepsin is not a definite body and that, as a matter of fact, its nature will vary according to the methods of preparation; it seems to be further inevitable that, by whatever process it is isolated, a considerable portion of mucus and similar substances will be present.

The fact that pepsins are of animal origin, has been the source of some amount of repugnance to their use, both on the part of patients and of physicians; the tendency of modern medicine has been to abandon the internal employment of members of the animal materia medica, and against this tendency the introduction of pepsins evidently militates. Again it has been pointed out, that the excretion of ptomaines or cadaveric alkaloids ceases in the animal body simultaneously with the arrest of the vital functions, so that it is not at all impossible that carelessly made specimens of pepsin might be contaminated with animal ferments or the products of their action upon the devitalised tissues. This danger is the more probable as consistently with the preparation of an active substance, sufficiently high temperatures cannot be employed in the isolation of the digestive agent to destroy the ptomaines possibly present.

In view of these objections to pepsin and the allied agent pancreatin, a good deal of interest was excited by the earlier accounts of the wonderful properties of the fruit of the Papaw tree, a native of tropical America, which was credited with the power of disintegrating and more or less completely digesting flesh simply hung beneath its branches.

*Carica papaya*, belonging to the Natural Order Papayaceæ, is a tree which grows to about 20 feet in height and 2 feet in diameter. It is easily and quickly raised from seed, attaining a thickness of 1 foot by the third year and commencing to decay during the fourth or fifth year. The straight and undivided stem is herbaceous and soft, though it develops an external layer of fibrous tissue; as might be expected from the rapidity with which it grows, the trunk is hollow, though at irregular intervals it has more or less dense, imperfect septa. The newer parts of the stem are green, but as they age become greyish; towards the top it also bears the scars formed by the falling off of leaves, which are arranged in a kind of umbellate canopy.

The large palmately-cleft leaves are borne upon long petioles, from the basis of which the pale yellow flowers originate. Like other species of the same order the flowers of the papaw are unisexual. The staminate flowers are borne upon a long peduncle in a racemose form, while the pistillate flowers are sessile.

The tree continually flowers and simultaneously bears fruit, the latter ripening at the lower part of the crown of foliage while the flowers are just opening at the apex. The



flowers, as also some other parts of the plant, resemble Indian Cress (the nasturtium of the garden) in odour and taste.

The fruits are somewhat melon-like in form, or they may be more ovoid and pointed at the apex. When first formed they are green, but as they mature they become yellow or dull orange coloured. A large fruit is said to sometimes attain a weight of 10 lbs. The rind is thin, and within it is the yellowish flesh, with a pleasant sweet taste, enclosing a cavity containing the dark brown or black seeds.

By the natives of the districts where it grows the fruit of *Curia* is largely consumed and regarded as highly nutritious. The milky juice of the unripe fruit and the powdered seed have the reputation of being powerful anthelmintics, and it was further reported, that the former had the property of softening the toughest meat when boiled with it for a short time. Some parts of the plant were esteemed as vulneraries, and the juice of the ripened fruit was said to be used in removing freckles and spots from the complexion.

These reports naturally attracted considerable attention and the juice was subjected to analysis by a number of chemists. Vauquelin found that the juice resembled animal albumen in its characters, and Wittstein stated, that it contained a ferment which had a most energetic action on nitrogenous substances.

The leaves, like most other parts of the plant, yield a neutral, yellow, milky juice, with a sharp bitter taste, which by the addition of sugar, glycerine, ether or chloroform may be readily preserved. Milk is at first coagulated by it, and subsequently changed to an aqueous liquid. Upon albumen, meat, and blood fibrin its effect is to soften and dissolve; the best temperature for effecting this is, as appears from experiment, 30 to 40° C. It was also found to kill and practically dissolve tænia, ascarides and other intestinal parasites.

From the milky juice of the fruit an active principle, Papain, is isolated, which occurs as an amorphous white, or yellowish white powder, odorless, and with a scarcely perceptible taste. The composition of the substance is not yet made out, but it indicates on ultimate analysis a content of 10.6 per cent. of nitrogen. Papain is soluble in water, and 0.1 part will dissolve 10 to 20 parts of blood fibrin. The aqueous solution is rendered turbid by boiling, and is precipitated by alcohol, by acetate of lead, by tannin, by nitric acid, etc.

This principle has been proved to possess the peptonising properties of the juice in a very high degree of concentration, and the experiments of careful observers have shown that papain, in concentrated solution, will dissolve more meat-fibrin or coagulated albumen than will pepsin in the same time. It must also be pointed out that the vegetable principle differs

from the animal substance in that first, it is most active in the presence of a small quantity of fluid, and secondly, it is almost equally effective in acid, neutral, or alkaline solutions.

One of the first uses to which the solvent powers of papain were put in European medicine was for the breaking down and solution of the false membranes of diphtheria. It is used in 5 per cent. solution, and painted or sprayed on the affected parts. Asch, Kohts, Oebrel, Rossbach, Schaffer and others used such solutions, and found them to be very successful. Dr. Jacobi, President of the New York Academy of Medicine, used papain in several cases of diphtheria or croup, and observed that its local application was followed in a few hours, or at the most days, by the disappearance of the membranes. Similar experience is recorded by Prof. Croner, Dr. J. R. Bromwell (Washington), and other authorities. Dr. J.B. Richardson characterised it as the best and most rapid solvent for diphtheritic membrane he had used.

It was in virtue of the same solvent property that the principle was recommended and employed in the treatment of the various affections of the skin associated with a thickening of the epidermis and with the formation of crusts. Drs. McKenzie and Johnston extended its employment, by applying a 5 per cent. solution, with half the weight of sodium bicarbonate, to the clearing out of the middle ear when it was plugged with masses of wax, or epithelium, or morbid secretion that syringing could not remove.

The property already mentioned of softening and more or less peptonising flesh and fibrin, at a temperature of 30 to 40° C., evidently indicates its adaptation to internal administration (in doses of 1 to 5 grains) as a means of relieving an enfeebled stomach of part of the work of digestion. It is further noteworthy that, besides exerting its peptonising action on the albuminous and fibrous contents of the stomach, papain increases the secretion of the gastric juice and prevents the fermentation of the food. By virtue of these properties, it has been given with considerable success in the treatment of gastric catarrh, and in dyspepsia, while in dysentery and the chronic diarrhoea of infants it has also proved a valuable remedy.

Perhaps one of the principal fields of usefulness in which papain was been widely employed is in the expulsion of intestinal parasites. A number of authors have recorded cases in which its administration has been followed by the discharge of tænia, ascarides, etc. in a shrunken and partly digested condition. Unlike a majority of so-called anthelmintics it is not dangerous to the patient, nor is it unpleasant to take. It must be remembered that although papain destroys the parasites, it does not directly expel them from the body; this must be effected

by following the dose of papain with a laxative or mild purgative.

The vegetable peptoniser has also been given internally in diphtheria as an adjunct to the local treatment. In combination with cinchona it is given as a tonic to enable the patient to resist the debilitating tendency of the disease. The combination is also indicated in the treatment of the digestive troubles of children, and of those with delicate stomachs, as it combines the specific peptonising properties of papain with the strengthening qualities of cinchona.

With reference to the method of prescribing papain, it is unnecessary to say much. The remedy is best of all used alone in the solutions and doses mentioned above. As it is, as already stated, precipitated by alcohol, (tinctures, etc.) acetate of lead, tannin and nitric acid, it should manifestly not be prescribed with these; the same would be true of mercuric chloride and salts of other heavy metals, which are known to be prone to throw nitrogenous compounds out of solution. With dilute hydrochloric acid, and with boric acid, it is quite compatible. Against anæmia it has been recommended (2 grain doses) in combination with quinine (1 grain), or with calmus rhizome (4 grains). For flatulent diarrhoea 1 grain is prescribed in pill with  $\frac{1}{4}$  grain of opium, and against gastric catarrh 2 grains with 5 grains of bicarbonate of soda. Externally an aqueous solution of 20 grains to the ounce is used; Dr. J. B. Richardson recommended, a combination of papain 2 drams, hydronaphtol 3 grains, dilute hydrochloric acid 15 min., distilled water to 4 ozs. A 10 per cent. solution with 5 per cent. of borax is useful against eczema, psoriasis, and callosities of the epidermis.

In conclusion attention should be called to the necessity of exercising care in the selection of brands of papain, as there are many kinds which are almost destitute of peptonising power and, therefore, useless for the purposes indicated above. The value of a good specimen can be readily estimated by digesting 100 grains of finely minced raw lean beef with 1 grain of the papain and 1 oz. of distilled water, containing 2 grains of hydrochloric acid or bicarbonate of soda. After 20 minutes, digestion at 100° F. (with assiduous stirring) the liquid should be strained through muslin, the undissolved residue washed, dried at 212° F. and weighed. Allowing 75 per cent. for moisture in the raw beef, from 60 to 90 per cent. of the meat should be dissolved.—*Notes on New Remedies.*

Paddock in the *Archives* says, ergot of rye is useful in all forms of chronic congestion and vascular dilatation in the eye, particularly episcleritis and chronic conjunctivitis. It should be given in maximum doses.

## LIQ. HYD. PERCHLOR. IN DIPH- THERIA.

Noticing in the *British Medical Journal* of December 13th, 1890, the high percentage of deaths from diphtheria, I am induced to suggest through your columns a trial of liq. hyd. perchlor. in drachm doses, given every hour at the onset, and then at longer intervals as the case improves. I have now adopted this treatment in about sixty cases with the best result, not having had a fatal termination since first trying it. My formula for a child of 3 or upwards is R tr. fer. perchlor.  $\mathfrak{z}$ j, liq. hyd. perchl.  $\mathfrak{z}$ j, glycerin. ad.  $\mathfrak{z}$ ij: dose a dessertspoonful every hour from four to six hours, and then every two, three or four hours, as the case may require. For an adult I give R tr. fer. perchlor.  $\mathfrak{z}$ ij, liq. hyd. perchl.  $\mathfrak{z}$ j, glyce.  $\mathfrak{z}$ ss, sol. pot. chlor. ad.  $\mathfrak{z}$ vii, dose  $\mathfrak{z}$ j each hour, and repeated as in the case of the child. The addition of potass. iodid. to this mixture does not appear to have any beneficial effect. With this treatment local applications, such as painting the fauces, spraying the throat, or the use of gargles, are not needed, and in my hands appear to do far more harm than good. In severe cases poultices and the steam kettle are certainly beneficial. I find in most cases, after four or five doses, that the membrane becomes dull and soft, and inclined to pucker up; by the end of twenty-four hours it is almost like mucous, and ready for expectoration; and that by the end of forty-eight hours nothing but an inflamed sore throat remains. In one obstinate case I gave a drachm dose to a child, aged 7, every hour for thirty-two hours without any evil result. I have never yet met with a case of salivation from the use of this drug, nor have I seen a case of diphtheric paralysis follow when it has been employed.

Some time since, when attending two children, the nurse girl contracted the disease. I sent her some medicine, and the next night, after dark and in heavy rain, she came to the surgery for more. The day following, instead of being worse, I found her considerably better. Since then I have not been so particular about confining a patient to one room, but have treated a number of cases where the patients have gone about, indoors and out, as they saw fit, with equally good results.—*Frank A. Coward in Brit. Med. Jour.—Denver Med. Times.*

## GOOD POINTS FOR STUDENTS AND DOCTORS.

Dr. W. H. Steele, in *Items of Interest*, says: Our colleges will turn out an unusually large number of graduates in the spring, who undoubtedly expect to locate in some Canaan of promise and build up a practice. It shows push and pluck for a young man to strike out for

himself, much more so than to buy out a practice or partnership. We all, who have tried it, know it requires many things besides a sheep skin to successfully conduct a practice. I will give a few points, many of which I have learned from sad experience, so that others may profit by my errors and losses. Don't neglect your business. Don't misrepresent anything to get business. Don't try to economize by using cheap material or poor instruments. Don't make any promises, either financial or professional, that you cannot fulfil. Don't lock your office during office hours to go off on a frolic, or to attend to any side show, or for any other purpose that can be avoided. Don't try to tear down a competitor's reputation on which to build your own; it makes a rotten foundation. Don't forget that the poor have feelings, as well as the rich, and are just as deserving of respect and your best services. Don't be cross to the little ones; some day they will be men and women, and they will remember you for good or for bad. Don't fail to take several good journals, and to keep yourself posted on all new instruments and improvements. Don't buy a bill of goods because they are cheap or you can get time on them. Do a cash business, and be a cash customer to everyone. It will wonderfully enhance your reputation in the community. Don't repeat some slanderous story that may have been told you by talkative parties while operating for them. Don't let a "good enough job" go out of your office; do your very best every time for every patient. By this means you will improve your work, improve your patronage, and improve your bank account. Don't fail to be prompt in collecting and paying your bills, if from any cause you feel obliged to give or receive credit. By so doing you will gain and keep the confidence of all. Don't use tobacco in any form; it is certainly of no benefit to you, and, to say the least, will work you harm physically, morally and financially. Don't use intoxicating liquors, for intemperance is the rock on which many a good practice has been stranded, and by indulgence leads to excess. Don't forget there will come a time when your eyes will grow dim, and your hand lose its cunning. It is when you are young, healthy, and prosperous that you should lay aside something to fall back on in sickness and old age, and when you will be glad to be able to reflect that you are leaving a busy, bustling world better for the part you have played in it. A serene, satisfied old age, well provided for, must be delightful.—*Die Doctor. — Med. Herald.*

IVY POISONING.—Kite (*Med. News*) says that bathing the parts with "black wash" effects immediate relief and a prompt cure.

## CONTINUOUS INHALATION FROM THE YEO RESPIRATOR.

One of the most useful, as it is one of the simplest, devices for the inspiration of medicinal vapors is the little perforated zinc respirator devised by Dr. J. Burney Yeo, of London. In New York this little instrument is erroneously called the "Robinson Inhaler."

It is simply a little cage of perforated zinc, bound with cloth or chamois skin, carrying a sponge, and fitted with elastic hoops to attach around the ears, so that it fits over the nose and mouth. The respired air becomes impregnated with the vapor of any volatile medicament dropped upon the sponge, and as the little machine, being light and cleanly, can be worn for prolonged periods, a continuous medication of the respiratory tract is thus effected.

Specimen formulæ of the solutions most generally useful are as follows:

R—Creasoti (Beechwood)	} aa f 5 ij.—M.
Eucalyptol (puriss.)	
Terebenis,	
Chloroformi	

Sig.—For inhalation, twenty drops to be placed on sponge of Yeo respirator and renewed as necessary.

R—Thymol	5j,	} aa f 3 iv.—M.
Alcohol,		
Spts. chloroformi,		

Sig.—For inhalation, ten to fifteen drops on sponge of Yeo respirator, etc.

Among other medicaments which may be used singly or in combination, are alcoholic solutions of menthol, compound tincture of benzoin, oil of turpentine, oil of pine (*sylvestris* or *pumilon*), and, indeed, all terbinthinates, balsamics and essential oils. A very useful drug for inhalation in this way is ethyl iodide. It may be used singly or in combination. A favorite formula in the Medical Clinic of the Jefferson Medical College Hospital, during my term of service there, was the following:

R—Creasoti (Beechwood)	} aa f 3 ij.—M.
Ethyl iodidi,	
Terebenis,	
Alcohol,	

Sig.—For inhalation, twenty drops on sponge of Yeo respirator.

In cases of syphilitic disease of any portion of the air passages, ethyl iodide is particularly applicable, but it is often of great use in non-syphilitic phthisis, in simple bronchitis, in bronchorrhœa and in chronic catarrhal pneumonia. It may produce systemic effects, even iodism, if pushed sufficiently. Creasote and thymol find their principal indication in phthisis. Terebene, eucalyptol, and the like, are useful in subacute and chronic bronchitis, and when used in phthisis their principal benefit is from their influence upon collateral inflammations. Com-

pound tincture of benzoin is advantageous in acute cases of bronchitis and laryngitis, but steam inhalations are to be preferred in acute conditions, as set forth in the first of this series of clinical notes. Alcohol is used as a solvent and diluent. Chloroform and its solution in alcohol are useful in allaying irritative cough, and in mitigating the sharpness of the more pungent vapors—thymol eucalyptol, menthol, and some specimens of terebene. In some cases chloroform alone may be employed, especially at night, to secure relief from useless cough which prevents sleep. From five to fifteen drops is usually a sufficient dose.

In making use of the respirator, the sponge should be moistened with warm water, all excess of water being removed by squeezing. The medicinal liquor is then dropped upon it, and need rarely be renewed in less than eight or ten hours, sometimes not for twelve hours. The respirator should be worn as often as possible during the twenty-four hours, and as long as possible at a time. Many patients can comfortably sleep with the respirator in position. The object is to secure a mild and continuous topical medication.—Solomon Solis-Cohen, M.D., in *Univer. Med. Mag.*—*Columbus Med. Jour.*

#### ACTION OF CAFFEINE.

Germain See (*L'Union Médicale*—*N. W. Lancet*) says:

Caffeine, in small repeated doses amounting to about ten grains per diem, may be given with advantage to soldiers on the march, aiding the muscular work by increasing the activity of the motor part of the nervous system, cerebral as well as spinal. The result of this double action is to diminish the sensation of effort and to ward off fatigue, constituting at the same time a nervous and a chemical phenomenon.

Caffeine prevents shortness of breath and the resulting palpitation. It also gives at once to a man who undergoes violent and prolonged exercise the force which he needs. By its excitation of the motor part of cerebro-spinal system, upon which depends the increase of muscular tonicity, it increases the loss of carbon from the organism, particularly from the muscles, but does not restrict the loss of nitrogenized material; it is not a means of saving to the economy.

A saving action in general could be completely exercised upon superior animals, to prevent the bad effects of fasting—only in a condition impossible to realize,—inaction or immobility more or less absolute, where there is little expenditure without work. With caffeine we find just the reverse; that is to say, hard work, obtained only at an extravagant expenditure of the organism. It is by making combustion more active that caffeine makes possible muscular work together with the effort.

It has no mysterious property of taking the

place of food; it takes the place only of the general tonic excitation produced by the ingestion of food. If, in a word, we admit that it is the immediate action of foods that stimulates the stomach and the nervous system, and that their alimentary value is at first of no account, we may substitute one stimulant for another. But caffeine, from saving the reserve force, puts the ill-nourished man in a position to work only by attacking these reserves, which it hastens to destroy by the excitation of the nervous system and of the muscles; thus the nutritive stock of the organism is quickly exhausted, and caffeine cannot prevent it.—*Columbus Med. Jour.*

#### TO PRODUCE LOCAL ANESTHESIA.

A British dentist says:—From time to time we have had recommended to us formulæ for solutions for producing local anesthesia in teeth extractions, but in my hands they have been “vanity and vexation of spirit;” so have the preparations which are advertised in the dental journals. The following has given the best results, especially for the extraction of stumps, the objection being its powerful odor:

R	Æther pur.	3vj.
	Menthol,	5iv.
	Ext. Cannab. Ind,	grs. 80.
	Ol. Menin. Pip,	5j.—M.

I used it this morning in the extraction of a broken down first upper molar, and though it had to be extracted in two pieces, not the slightest pain was experienced. Such was the testimony of my patient, and he was the better judge.—*Columbus Med. Jour.*

#### NOTES ON CHLORALAMID.

Dr. I. N. Love prints the following in the department, “Therapeutic Tips,” edited by himself in his own journal, the *Medical Mirror*:

“There has been nothing presented to the profession for many a long day in the form of a sedative which is of more real value than Chloralamid (Seheing.) It has become one of the favorite hypnotics. The *Journal of Nervous and Mental Diseases* has recently commended it very highly:

“Locally, chloralamid has been found to be absolutely free from irritation, even when applied to the conjunctiva.

Chloralamid induces an apparently natural sleep in from one half to three hours. The only unpleasant effects that have been noted are occasionally headache, lassitude, and a desire to sleep in the morning. The best results are obtained when insomnia is due to neurasthenia, hysteria, old age, and to such conditions as chronic alcoholism, cardiac and bronchial asthma, subacute nephritis, diabetes and other chronic conditions. Audle considers its chief

advantages lie in the fact that it is not objectionable to the palate, and that its effects are soon manifested. Brainerd calls attention to the fact that it is more soluble and less expensive than sulfonal. The danger of a large dose is less than in chloral. Hagen and Huesler, of Erlangen, pronounce it one of the most reliable of hypnotics.

**Administration of Chloralamid.**—Much depends upon the proper administration of the new hypnotic, chloralamid, to obtain the full effect, and satisfactory and beneficial results. The dose is from 15 to 60 grains, with an average dose of 30 grains. Chloralamid is soluble in about 20 parts of cold water, and in one and a half parts of alcohol.

An additional caution is necessary: Never dissolve or disperse chloralamid in hot water or warm solutions, as the heated preparation decomposes.

The best modes of administration are:

1. In a teaspoonful of whisky or brandy.
2. In properly proportioned solutions with wine, spirits, or spirituous compounds.
3. In a small cup of cold water or cold tea.
4. In powder form, in wafers or cachets washed down with cold water.

I have found that it served admirably as a sedative when other agents had failed among the cerebral disturbances of children. Give an infant from six months to a year old from two to four grains and it will produce good sleep often when chloral hydrate and the bromide of sodium have failed."

Some Physicians are particularly inclined to administer drugs and remedies by hypodermic injection. It must not be lost sight of that in chloralamid, for instance, or in the case of similar remedies, the hypodermic dose must be very much smaller than the regular dose orally, or serious consequences will ensue. It is a poor way of giving this remedy, however, and should be discountenanced.

#### PRESCRIPTION OF CHLORALAMID.

Galiana recommends the following prescription when using chloralamid:

R Chloralamid	45 grains.
Dilute hydrochloric acid	5 drops.
Distilled water	2 ounces.
Syrup of raspberry	2½ drachms.

One-half of this amount may be given. This may be divided into four doses, one of which may be given every four hours. For rectal injection he recommends:

R Chloralamid	30 grains.
Dilute hydrochloric acid	3 drops.
Distilled water	3 ounces.

Or the chloralamid may be dissolved in an infusion of tea to which should be added a considerable quantity of sugar.—*Medical News.*—

*Notes on New Remedies.*

#### FOREIGN BODIES IN THE EYE.

Prof. David Webster, of New York, thus concludes an article on this subject, in the *Med. Record*:

1. Always search carefully for foreign bodies on the cornea and on the conjunctiva in cases of inflammation of one eye coming on suddenly and without other apparent cause.

2. Remove them, when found, with as little injury to the surrounding parts as possible.

3. When a foreign body is lodged within the eyeball, especially in the ciliary region, the patient is in danger of losing the fellow-eye by sympathetic inflammation, whether the foreign body is removed or not. The removal of the foreign body greatly lessens such danger.

4. If the foreign body has already destroyed the sight the eye should be enucleated without delay.

5. If sympathetic inflammation sets in, the sooner the eyeball containing the foreign body is enucleated the better will be the patient's chances of retaining useful sight.

6. If the fellow-eye is attacked with symptoms of severe *sympathetic irritation*, the eye containing the foreign body should be enucleated without waiting for actual sympathetic inflammation.

7. The magnet is serviceable in cases where the foreign body is of attractable material and *can be seen*, and is not firmly embedded in the eye-wall, nor encapsuled with organized lymph.

8. Where the foreign body is small and its lodging place uncertain the introduction of a magnet into the eyeball is generally to be deprecated.

9. After the foreign body has been *extracted* from the interior of the eye the patient should be warned that sympathetic inflammation may occur, and, in such a case, should not be neglected.—*Columbis Med. Jour.*

Menthol dissolved in vaseline, five grains to the ounce can be sprayed into the throat and forced thence into the ear by Valsalva's method. This is a very neat and simple way of applying a medicament to the lining of the eustachian tube and when the tympanic cavity is inflated in this manner the result is more marked and more permanent than when inflation without spraying is practiced.

The above spray will relieve the irritation of chronic asthma when other remedies fail to give satisfactory results.

Nothing is much more disagreeable the moment it is applied to the nasal mucous membrane or much pleasanter five minutes later, than a solution of iodoform in ether, one-half drachm to the ounce.

Chronic inflammation of the mucous mem-

brane of the naso-pharynx which persists in spite of detergent and astringent sprays and washes, is sometimes relieved by touching the surface here and there with a saturated solution of chromic acid.

Batteries sometimes fail to give satisfaction because the connecting wires break off inside the insulating cover and the connection is only made occasionally.

The following prescription has given great comfort to some of our patients suffering from piles of great tenderness, but of short duration and no marvelous magnitude :

R. Plumbi iodidi	ʒij.
Tr. iodini co.	ʒxx.
Pubo. galli	gr.xx.
Ext. opii	gr.xx.
Cocoa butter	ʒij.
Misce et ft. supposit. No. xx.	

Apply one night and morning after replacing the hemorrhoids.

For infantile diarrhœa we have this summer adopted the following treatment in most cases and with happy results. Stop milk and all other food and give only Mellin's food or one of those akin to it. Give one of the following powders every hour till the stool becomes less offensive in odor and more natural in consistency :

R. Salol	gr. j.
Zinci sulphocarbolat	gr. ss
M.	

—*Kansas Medical Journal.*

#### NASAL SPRAY.

Several years ago Dr. Roosa, of New York, published an article in which he warned his medical brethren that the use of the nasal douche could not be considered as entirely harmless, and he narrated a number of instances in which more or less serious inflammation of one or both middle ears had followed its use. Other writers confirmed his statement and, recently, in the *Record*, Dr. A. H. Buck has reaffirmed his former opinion as to the dangers of the douche. As a substitute, he recommends the use of a spray of the following ingredients :

R—Eucalyptol,	1 grain,
Oil wintergreen,	1 grain,
Menthol,	2 grains,
Benzoinol,	2 ounces. M.

Or, if the patient dislikes an oily preparation, the following may be prescribed :

R—Listerine,	1 part,
Water,	3 parts. M.

In the presence of an accumulation of viscid mucus or of crusts, a stream of flowing water will doubtless be found a more effective cleansing than a stimulating spray, but it is only in this respect that I can perceive any superiority of the douche over the sprays formulated above.

Furthermore, if the latter are used freely—that is, several times a day—and each time during the inhalation (by the patient) of a deep breath, with closed mouth, crusts and tough mucus will speedily cease to play a part in the therapeutic problem.

"In not a single instance have I known the freest introduction of the mixtures named to be accompanied by any unpleasant aural symptoms. The immediate effects are very gratifying to the patient, and in a brief time a permanent diminution of the nasal and naso-pharyngeal irritation can generally be noted. The use of sprays, however, must be looked upon only as a valuable method of supplementary treatment, and not as a therapeutic procedure of the first order. The removal of hypertrophied glandular tissue and the local application of silver nitrate are the only remedial measures that are at all worthy of being considered fundamentally curative of the conditions which usually lead the physician to prescribe the use of the nasal douche or one of its substitutes."—*Columbus Med. Jour.*

#### TO PRESERVE CADAVERS.

The best injecting fluid is ten per cent. of phenic acid in glycerin ; in winter five per cent. will do. Alcohol may be used with an equal quantity of the glycerin, making the solution more penetrating. For economy a saturated arsenical solution may be added to the injection ; two-thirds of the ten per cent. glycerin with one-third of arsenical solution will suffice. The preservative would be better if composed of half a litre of chloride of zinc to half a litre of the arsenical solution ; five litres would be required for an ordinary subject. The injection may be made by the carotid, or, better, the aorta, and should be given slowly with moderate pressure, using either a syringe or an elevated receptacle. The room for storing cadavers should be dry, of constant temperature, and scrupulously clean and free from odor.—*N. Y. Med. Jour.*—*Columbus Med. Jour.*

#### GLYCERIN SUPPOSITORIES.

The *Boston Med. and Surg. Jour.* quoting from one of its exchanges states that Balland gives the following formula, stating that the suppositories are not brittle :

R. Lanolin.	
Glycerin,	āā gr xxx
Cacao butter,	
White Wax,	āā gr. xv

M.—Sig. For one suppository.

The lanolin is first melted with the wax and the cacao butter. Then the glycerin is added, and the mass is poured into moulds. The mould should be placed in a mixture of ice and salt to prevent a separation of the glycerin.

## MOLLIN, A NEW OINTMENT BASE.

Dr. Julius Kuhn writes to the *Berliner klinische Wochenschrift* regarding the objectionable features of some of the ordinary excipients for ointments. Almost all animal fat, he says, becomes rancid; lanolin is too tenacious for inunction purposes, will not dissolve chrysarobin, and will not subdivide mercury fine enough; vaseline is better in some respects, being more permanent, but it takes up some substances with difficulty, and in hot weather is soon too fluid on the skin; moreover, some specimens of it contain so much of impurities as to be irritating to the surface treated. In 1885 Unna pronounced it as his opinion that the best ointment base was soap, but it was not always easy to find a pasty soap that would remain unaltered at ordinary temperatures, have penetrating qualities, and mix well with the curative ingredients proposed to be used. A soap has been made by the druggist Carez, called mollin, which is said by Kuhn to meet all these requirements. Mollin appears to be a superfatted soap, holding 17 per cent. of fat in excess. It contains a little cocoa-nut oil and about 30 per cent. of glycerin, besides kidney-fat, tallow, and soda and potash mixed, chiefly the latter. It is said to keep unaltered for years. It is put up in two forms, one a little harder than the other.—*Med. Herald*.

## A READY METHOD OF DIAGNOSING CORNEAL ULCERS.

When a solution of fluorescein is dropped into an eye that has lost any of its epithelium the spot is dyed a deep green color. It is one of the coal tar products, of a red color, and soluble in water. The strength of the solution used was ten grains to the ounce with the addition of fifteen grains of sodium bicarbonate. It is non-irritating even when there is intense inflammation present. Dr. Randolph has used it in over one hundred cases and has found its effects constant. The stain remains from half an hour to two hours, and has no effect on the healthy cornea. Small ulcers hardly distinguishable by oblique illumination were made plainly visible by a drop of the solution. This means of diagnosis is especially of service in the case of young children with corneal ulceration in which the photophobia is so intense that a good view is hardly obtainable. Also in the cases of foreign bodies in the cornea, their position can be located by the green ring formed around them.—*Kansas Med. Jour.*

The diseases of the uterus and its appendages and diseases of the eye bear a strong relationship to one another and a direct connection can be traced between the two. Patients unquestioned

will often remark that during menstruation their eyes give them more trouble than at any other time. Ladies who suffer from scanty and painful menstruation, invariably have small pupils at their menses. This is doubtless due to the iris being unusually supplied with blood, owing to the scanty menstrual flow. A sudden cessation of the physiological functions of the uterus causes venous hyperæmia, which on its part will cause stagnation of the blood in remote localities. Misplacement of the uterus, ovarian disease and insufficient menstrual flow are female troubles most likely to produce or aggravate eye diseases; diseases of the uveal tract and scanty menstruation bear a very close connection.—*Kansas Med. Jour.*

## RECTAL ALIMENTATION.

Dr. Weaver formulates the following conclusions, which are quoted in the *Medical News* by Dr. A. H. Hills:

1. By the use of enemata life can be sustained indefinitely with little, if any, loss of weight to the body.

2. In a large proportion of cases in which rectal aliment is used, true digestion of albuminous saccharine and fatty food takes place, by virtue of a reversal of the normal peristalsis of the alimentary tract.

3. While this is the case, there are doubtless instances in which retrostalsis does not occur, and for that reason the food used should first be artificially deposited before being injected into the rectum.

4. While milk, eggs and brandy are the best ailment for rectal nutrition, no one article should be used for too long a time, but frequent changes should be made, observing the greatest care to prevent irritation of the rectum, or intolerance of that organ for the nutriment required.

5. The enemata should, if possible, be administered by the physician himself. Where difficulty in retaining the aliment is encountered, the colonic method is preferable, the food being propelled through a rectal bougie. The food should be of the temperature of the body.

6. The rectum having once become intolerant of enemata, *absolute rest* must be given to that viscus for a few days, and reliance be placed on nutritious inunctions of the surface of the body.

7. For rectal alimentation there exists a wider range of usefulness than has heretofore been assigned to it. It is not only appropriate in the severer forms of chronic disease of the stomach and œsophagus, but is indicated and should be utilized in the management of all *acute* diseases when, from any cause, the stomach becomes intractable and rebellious.

8. In diseases of the stomach, even where a portion of the food ingested is retained by that organ only to undergo fermentation, inducing thereby pain and distress, it is more logical to



employ rectal alimentation, not as an *adjunct* to, but a *substitute* for, stomachal ingestion.

9. Certain organic lesions as well as functional disturbances of the stomach are curable by means of rest to that organ, and by no other means. In rectal alimentation we have a safe and sure means of nutrition, pending the necessary period of rest to that organ.

### THE TREATMENT OF GONORRHEAL RHEUMATISM.

According to *Wien. Klin. Wochenschrift*, Rubenstein has found potassium iodide a rapidly-effective remedy in the treatment of gonorrheal rheumatism. He gave small doses, usually ordering one drachm of the iodide in five ounces of water, of which he directs the patient to take one or two tablespoonsful in the morning, and four or five tablespoonsful in the afternoon. In some cases he gives a still weaker solution, the patient taking one tablespoonful every hour. After a few hours, in most cases, the pain is markedly lessened, swelling subsides, and a cure is brought about in two or three days.

As to local treatment, the author usually envelops the joint in cloths saturated with a one per cent. carbolic acid solution. In some cases he uses a dressing of blue ointment, and in still others a solution of common salt. When the pain disappeared he applied an elastic band, and if there is effusion he aspirates. Rubenstein has treated in this manner fifteen cases, some of which were acute, others chronic, and all were cured.—*Med. Age.—Columbus Med Jour.*

### LIGHT IN THE SICK ROOM.

Dr. B. W. Richardson, in the course of a Lecture on "Disease and How to Combat it," remarks as follows:

Still a custom prevails, despite all our sanitary teachings, that the occupant of the sick room in the private house should be kept at all hours in a darkened room. Not one time in ten do we enter a sick room in the daytime to find it blessed with the light of the sun. Almost invariably, before we can get a look at the face of the patient, we are obliged to request that the blinds may be drawn up, in order that the rays of a much greater healer than the most able physician can ever hope to be may be admitted. Too often a compliance with this request reveals a condition of room which, in a state of darkness, is almost inevitably one of disorder everywhere; foods, medicines, furniture, bedding misplaced; dust and stray leavings in all directions.

In brief, there is nothing so bad as a dark sick room; it is as if the attendants were anticipating the death of the patient; and, if the reason be asked, the answer is as inconsistent as the act. The reason usually offered is that the patient

cannot bear the light; as though the light could not be cut off from the patient by a curtain or screen, and as though to darken one part of the room it were necessary to darken the whole of it. The real reason is an old superstitious practice, which once prevailed so intensely that the sick, suffering from the most terrible diseases, small-pox, for instance, were shut up in darkness, their beds surrounded with red curtains, during the whole of their illness. The red curtains are now pretty nearly given up, but the darkness is still accredited with some mysterious curative virtue.

A more injurious practice really could not be maintained than that of darkness in the sick room. It is not only that dirt and disorder are results of darkness, a great remedy is lost. Sunlight is the remedy lost, and the loss is momentous. Sunlight diffused through a room warms and clarifies the air. It has a direct influence on the minute organic poisons, a distinctive influence which is most precious, and it has a cheerful effect upon the mind. The sick should never be gloomy, and in the presence of the light the shadows of gloom fly away. Happily the hospital ward, notwithstanding its many defects, and 'it has many, is so far favored that it is blessed with the light of the sun whenever the sun shines. In private practice the same remedy ought to be extended to the patients of the household, and the first words of the physician or surgeon on entering the dark sick room should be the dying words of Goethe, "More light, more light!"—*Sanitarian.*

### NOVEL METHOD OF LAYING A FLOOR.

The *National Builder* says that a curious method of laying down floors has been adopted in France and has obtained a wide application. It consists in putting down flooring, not as hitherto on sleepers, but in embodying the boarding in asphalt.

The new floors are used mostly for ground stories of barracks and hospitals, as well as for churches and courts of law. Very little is known of the method outside of France, and as its usefulness is evident, it should have a wider application; therefore we append the following description:

For the floors in question, pieces of oak, usually two and one-half to four inches broad, twelve to thirty inches long, and one inch thick, are pressed down into a layer of hot asphalt not quite half an inch thick, in the well-known herring-bone pattern.

To insure a complete adhesion of the wood to the asphalt and obtain the smallest possible joints, the edges of the pieces of wood are planed down, bevelling toward the bottom, so that their cross-section becomes wedge-like. Nails, of course, are not necessary, and a perfectly level



surface may be given to the flooring by planing after laying down. The advantages of this flooring, which only requires an even bed on which to rest, are said to be the following :

1. Dampness from below, and its consequences, rot, is hereby prevented.
2. Floors may be cleaned quickly and with the least amount of water, insuring rapid drying.
3. Vermin cannot accumulate in the joints.
4. Unhealthful exhalations from the soil cannot penetrate into living rooms. Asphalt being impermeable to damp, rooms become perfectly healthful, even if they are not vaulted underneath.

In building with several stories, as in hospitals, the vitiated air of the lower rooms cannot ascend, an object which it has hitherto not been possible to attain by any other means known.

5. The layer of asphalt will also prevent the spreading of fire from one floor to another in case of conflagration.

The flooring here described has been laid in the numerous casements of the forts around Metz, to the satisfaction of the authorities. The cost is about twenty-five cents per square foot. This estimate, somewhat high, would be much lower in districts where oak and labor are cheaper, and the distances from places of construction less.—*American Gaslight Journal*.—*Sanitarian*.

#### A NEW WAY OF IRRIGATING THE NASAL CAVITIES.

Dr. E. Pins (*Wr. Med. Woch. ; Obl. f. Ther.*) has for some time endeavored to think of a method by which it would be possible to force fluids into the nasal cavities under a not too strong pressure, and to attain a shutting off of the upper pharynx or post nasal cavities without external aid, with at the same time the least liability to danger by the entrance of the fluid into the ear or the other cavities opening into the nose. Observing the fact that in strong expiration with the mouth closed, the soft palate completely shuts off the the nasal cavity, he made use of it in constructing an apparatus, which consists of a bottle with perforated cork, through which two glass tubes of unequal length pass. The longer tube, which passes to the bottom of the bottle, is furnished at its outer end with an olive tip which fits into the nose ; a mouth-piece is attached to the shorter tube, through which the patient blows while the other tube is in the nose.

The bottle being filled with fluid, the expiratory pressure is sufficient to force one to two quarts of fluid through the nose in a short time ; but is at no time so great, according to the author, as to involve the danger of forcing the fluid into the extra-nasal cavities. This did not

take place in 400 applications of this method among thirty patients of the author.

The method finds its contra-indications in diseased conditions of the respiratory and circulatory organs.—*Weekly Med. Review*.

#### SULPHONAL IN DIABETES.

Casarelli (*Annales de Thérapie Médico-Chirurgicales*, September, 1890) thus summarizes his observations : Sulphonal exerts a favorable influence upon diabetes, gradually lessening the quantity of sugar. The amelioration is evident after the remedy has been used for several days in the daily dose of one to two grammes (fifteen to thirty grains). The administration of sulphonal, even if very prolonged, is followed by no evil consequences. In the dose of three grammes, long continued, it produces a condition of lethargy, and sometimes delirium. But, if intermitted for a day, or if the dose be diminished, these manifestations cease. If the drug be abandoned the sugar soon reappears. Casarelli has also made use of antipyrine, but the results were less decided and satisfactory.—*Lancet-Clinic*.

#### INDIGESTION IN COLITIS OF INFANTS.

Dr. James M. French states (*Jour. Am. Med. Ass.*) that in cases of colitis of infants over-feeding should be avoided and cold drinks prohibited. Digestion may be facilitated by the administration of an active pepsin or pancreatine ; and the addition of a small quantity of calomel tends to arrest abnormal fermentation. He has rarely employed any medicines other than those contained in the following prescriptions :

R. Pepsini, gr. xij to xxiv  
Hydrargyri chlor. mitis. gr. ss to j  
Sacch. lactis. q. s.

M. ft. chartas No. xii.

Sig. One powder every three hours.

Or, in cases in which the intestinal digestion appears to be at fault :

R. Extracti pancreatis ʒss to j  
Hydrarg. chlor. mitis., gr. ss to j  
Sacch. lactis. q. s.

M. ft. chart. No. xii.

Sig. One powder every three hours.

It is better to give explicit directions that the powders be given immediately before or after nursing, and not oftener than once in three hours, as it is in this way possible to more completely rectify the error of too frequent feeding than by any other means, for our instructions as to the giving of medicine are more likely to be obeyed than are those pertaining to the correct manner of feeding the infant, a subject on which every mother has her own ideas.

## TREATMENT OF HERPES ZOSTER.

Dr. Matthew Beattie thinks (*Medical Record*) that he has found a treatment which will arrest and cure herpes zoster. He states that the methods given in works on "general medicine" are of no value in retarding the progress of the disease. He reports a case of lumbar zona in which his treatment was followed by comfort in eight hours and cure in six days. He failed to state how long the eruption had lasted before he was called in. The treatment is as follows—for internal use:

R. Ext. gelsem, 3j  
Sod, sulphocarbonate, 3j  
Aqua, q. s., ad. 3iij  
M.

Sig. A teaspoonful every two hours.

R. Tinct. bellad., ʒss

Sig. Five drops every two hours until throat begins to feel dry.

Externally:

R. Plumbi acetat, 3j  
Pulv. alumen, 3j  
Aqua, 3j  
M.

Sig. Apply to painful part every two hours. We have nothing to say about this treatment.

—*St. Louis Med. and Surgical Journal*.

## GARGLE AFTER TONSILLOTOMY.

Dr. E. J. Moure prescribes the following gargle after tonsillotomy:

R. Sodii bromid.  
Sodii borat. aa gr. xxxvj  
Acid. carbolic, gr. vj  
Glycerini puriss, ʒv  
Decoct. hordei et althæ, ad. ʒvj

M.—Sig. To be taken during the day.—*St. Louis Med. and Surg. Journal*

## BEEF TEA AS A NUTRIENT.

Thousands of sick people have been starved to death on this diet, and I want to enter my protest before it is everlastingly too late. What you want is the albumen and fibrin of the meat. The moment you coagulate these ingredients by heat you render them practically indigestible. Good milk is always preferable, but if you give beef tea don't boil it.—*Journal of Am. Med. Ass.—Kansas Med. Journal*.

Morphine can be given through the nose, dividing the dose into two parts, placing them each on the thumb and snuffing up the nose. It instantly begins to be absorbed, and its action is as rapid as when given hypodermically. Nasal cavities should first be cleansed before administering.

## THE TREATMENT OF BURNS.

Bardleben treats burns after the following plan: The injured part is first thoroughly washed with carbolic acid solution from 2½ to 3 per cent., or with a solution of salicylic acid about 3 in 1,000. All the bullæ are then punctured and the serum allowed to escape, after which the whole part is thoroughly dusted with finely powdered nitrate of bismuth, and a thick layer of cotton wool applied. The latter is changed whenever it is impregnated with the discharges from the wound. If the burn is a very extensive one, the powdered bismuth may be set aside, and a bismuth ointment used instead. The author affirms that with this dressing cicatrization proceeds very rapidly, and there is less discomfort than when any other dressing is employed. Despite the large quantities of bismuth that have been applied, no toxic symptoms have been noted in consequence of its use.—*The Medical Age*.

## CHILBLAINS.

The season is here when that very troublesome affection, perplexing to physician and aggravating to patient alike, known as chilblains, is with us. There are a multitude of cures offered, and while each has its defenders there probably are few that equal and none that surpass the following, which I think came from that distinguished physician and most estimable gentleman now numbered among the silent majority, Prof. Joseph Carson:

R. Ol. terebinth,  
Copaibæ, aa f 3j

M. Sig.—Apply to surface where not denuded.

Try it, and if it does not agreeably surprise you your experience will not tally with mine.—J. A. DeArmond, M. D., (Davenport, Iowa).—*Med. Summary*.

## SIMPLE HYPODERMIC SYRINGE.

Dr. Thomas, of Youngstown (*Med. and Surg. Reporter*), has devised a new form of syringe, so simple that every physician can make his own. It consists of an ordinary syringe needle attached to the bulb of the ordinary medicine dropper. The union between the two can be made more secure by winding around a few turns of thread. There is nothing about it to get out of order, and it is always ready for use.

## TREATMENT OF GALLSTONES.

According to Lekarckie, pilocarpine is almost a specific in the treatment of gallstones. It relieves at once the pruritus of jaundice. The dose hypodermically is one-eighth of a grain twice a day. Thirty cases have been treated successfully.

## DIARRHŒA.

The following simple and harmless recipe was a favorite of mine during the first twenty-five or thirty years of my practice. But now arsenite of copper is the professional fad, and this old formula may not be required. Still I think it worth recording:

R. Aquæ calcis,	3̄ vi
Syr. rhei. arom.,	3̄ j
Tr. opii. camph.,	3̄ ss
Tr. cardam. comp.,	3̄ ss

M. Sig.—One teaspoonful often in diarrhœa, cholera infantum, acid vomiting and acid stools, etc., of infants and young children.—*Med. Summary.*

## VOMITING.

The following was also my favorite and never-failing recipe for many years, for the vomiting of food in cases of dyspepsia, pregnancy, etc.:

R. Pulv. rhei.,	gr. x
Sod. bicarb.	gr. xx.
Ferri subcarb.,	gr. xv—xxx.
Bismuth subnit.,	3̄ j

M. et div. in pil No. x vel xii. One before rising in the morning in case of pregnancy, and one one-half hour before each meal.—*Med. Summary.*

## DIARRHŒA MIXTURE.

And one more handy mixture to carry in the pocket-case or vest pocket for ordinary diarrhœa:

R. Tr. camphoræ,	
McMunn's elixir opii.,	
Tr. rhei,	aa 3̄ ss

M. Sig.—Five drops every half hour until relieved; children, one or two gtt.

These old friends of late years have been more or less abandoned for new ones, but I often ask myself, "to whose good?"—Abram Livenzey, M. D., in *Med. Summary.*

## VOMITING OF PREGNANCY.

Gottschalk, of Berlin, recommends menthol in severe cases of vomiting of pregnancy. His formula is as follows: R—Menthol. gr. xv.; Spts. vini, 3vj; Aquæ dest, 3̄v. M. Sig.—One tablespoonful every hour.—*Med. Herald.*

Dr. W. K. Harris of Mulvane, Kas., uses for dyspeptic vertigo:

Acidi nitrici	gtt lx.
Acidi muriatici	gtt. c.
Aquæ camphoræ	f 3̄ viij.

M. Sig. Shake. Take one tablespoonful in one-half cup of water thirty minutes before each meal.—*Kansas Medical Journal.*

## ITEMS OF INTEREST TO THE PROFESSION.

## PRURITUS VULVÆ.—

R.—Sodium hyposulphite	3̄ 3½
Carbolic acid	gr. 30,
Glycerine	3̄ 2,
Water	3̄ 3½.

Sig.—To be applied locally.—*Buffalo Medical and Surgical Journal.*

R.—Acid phenic.,	gr. xv,
Tinct. opii.,	fl 3̄ iv,
Acid. hydrocyanic,	fl 3̄ iss,
Glycerin,	fl 3̄ iv,
Aquæ,	fl 3̄ iv,—M.

R.—Cocaine hydrochlorate,	gr. x,
Lanolin,	3̄ j.

M. Sig.—Ointment. Apply a small quantity to the affected parts.—*Gaz. de Gynec.—The Med. Bul.*

## CHRONIC CYSTITIS IN WOMEN.—

R.—Benzoic acid, pure,	gr. j,
Biborate of soda,	3̄ i,
Distilled water	3̄ vj.

M. Sig.—Inject into bladder night and morning.—*Columbus Med. Jour.*

## ANEMIA WITH AMENORRHEA.—

J. Milner Fothergill's prescription for amenorrhea accompanied by anemia:

R.—Acidi arseniosi,	gr. j
Ferri sulphat. exsicc.,	3̄ ss
Pulv. pip. nigr.,	3̄ j
Pil. aloes et myrrhæ,	3̄ j

Misce. et div. in pil. no. XL. Sig.: One twice a day after meals.—*Columbus Med. Jour.*

## EMMENAGOGUE PILLS.—

R. Valerianæ pulveris.,	} aa gr. 30,
Carthanii tictor,	
Ferri deuteroxid. nig.,	gr. 60,
Syrup acaciæ,	} q. s.
Pulv. gumm.,	

Make forty pills.

Sig.—One pill after each meal, to be increased to two or more.—*St. Louis Clinique.*

## GONORRHEA.—

R. Zinci sulpho-carbolatis,	3̄ ss
Fl. hydrastis,	3̄ ij
Glycerini,	3̄ ss
Aquæ rosæ, q. s.	ad. 3̄ viij

M. Sig.—Inject t. i. d.—*Med. Summary.*

## FOR LEUCORRHEA.—

R.—Infusion of chamomile,  $\bar{3}$  xvij,  
 Alum,  $\bar{5}$  ijss,  
 Iodide of potassium,  $\bar{3}$  j,  
 Tincture of iodine, m. xxxij.

M. Sig.—Three injections should be made daily, and in addition general tonics and sulphur baths are advisable.—*Columbus Med. Jour.*

## VOMITING OF PREGNANCY.—Goodell recommends:

R.—Cerii oxalat, 1 grain  
 Ipecacuanhæ, 1 grain  
 Creasoti, 2 drops M.

Sig. This to be taken every hour until nausea is controlled.—*Kansas City Med. Index.*

CONSTIPATION IN FEMALES.—(Lutand, *Rev. de Ther.*)

R.—Cit. of Iron and ammon., gr. 30,  
 Fl. ext. of cascara sagrada, m. 30,  
 Saccharine, gr. 8,  
 Distilled water, f  $\bar{3}$  ijss.

M. S.—Half teaspoonful before each meal.

FOR HYSTERICAL VOMITING.—(Ewald, *Rev. de Therap.*)

R.—Hydrochlorate of morphine, 3 grs.,  
 Hydrochlorate of cocaine, 5 grs.,  
 Tincture of belladonna, 75 m.,  
 Cherry-laurel water, f  $\bar{5}$  vjss.

M. Sig.—M. x-xv drops each hour.  
 —*Columbus Med Jour.*

## LA GRIPPE.—

R. Tr. belladonna, gtt. 72  
 Tr. cannabis indica, gtt. 120  
 Tr. benzoin comp, f  $\bar{5}$  ij  
 Syr. prunus virg, ad f  $\bar{3}$  iij

M. Sig.—A teaspoonful every three hours.  
 —W. R. D. Blackwood, M. D., (Philadelphia, Pa.)—*Med. Summary.*

## PROF. PEPPER GIVES FOR HYDROTHORAX:—

R. Mass, hydrarg., }  
 Pulv. scillæ, } aa gr. xx  
 Pulv. digitalis, }  
 Ext. nucis vomicæ gr. x

M. et ft. pil. No. xx. Sig.—One pill three times a day.

Or.—

R. Hydrarg. chlor. corros., gr. j  
 Potassii iodidi,  $\bar{5}$  ij  
 Spt. etheris nitrosi, f  $\bar{3}$  ss  
 Aqua cinnamomi., q. s. ad. f  $\bar{3}$  iv

M. Sig.—One teaspoonful thrice daily.

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## EDITORS:

A. LAPHORN SMITH, B.A., M.D., M.R.C.S., Eng., F.O.S., London  
 F. WAYLAND CAMPBELL, M.A., M.D., L.R.C.P., London.

## ASSISTANT EDITOR

ROLLO CAMPBELL, C.M., M.D.

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MONTREAL, JUNE, 1891.

## WANTED A CURE FOR CANCER.

A few centuries ago there were no doubt many diseases which were at that time considered, and rightly so, to be incurable. But since then and especially during the last decade the list of incurable diseases has gradually melted down under the penetrating rays of pathological research and scientific therapeutics. Of the few obdurate diseases which so far have resisted treatment or at least in which treatment has not been followed by cure, one of them, consumption bids fair before another quarter of a century to be as much a thing of the past as plague is now. For even if Koch's tuberculin treatment fails at least his investigations have forever settled the question of its contagiousness and from that point to the complete stamping of it out by isolation is only an easy step. But from the cure of cancer we seem to be just as far off as ever, in fact we are completely in the dark. But with a whole army of ardent investigators at work upon it we have good reason to hope that even it will eventually come under the category of curable diseases. Among the many claimants to the title of cancer cure is Count Mattei, an Italian nobleman, one of whose remedies

bears the captivating name of "green electricity." The bottles so labelled contain a liquid which careful analysis has shown to be nothing more than water. Nevertheless there are not wanting even medical men who maintain that although they were altogether sceptical as to its being able to produce any effect were obliged to confess that the patients on whom it was tried showed unmistakable signs of improvement. An English journalist, Mr. Stead, is about to have Count Mattei's remedies tested so as to either establish or demolish their claims to a cure. Sir Morrell McKenzie, Mr. Lawson Tait and Dr. E. W. Votter have consented to act as a committee, Mr. Stead having placed four beds at their disposal for this purpose. Among the other claimants to the title of cancer cure may be cited the continuous galvanic current, the interrupted galvanic current, chian turpentine, and pyoktanin or methyl blue. High currents of galvanism and solutions of methyl blue have been found by experience to kill bacteria, and it is on the supposition that cancer is a germ disease that reliance upon these remedies is based. Although the death rate from cancer is small compared with that of consumption it is a disease so dreaded by all that the discoverer of a cure for it would be hailed as one of the greatest benefactors of his race.

#### SULPHONAL.

According to a recent editorial in the *N. Y. Medical Record*, the above drug has come to stay. We had already come to the same conclusion after having tried it in a great variety of conditions in which increased cerebral and spinal irritability were annoying symptoms. Dr. Vorster, in the *Allgemeine Zeitschrift für Psychiatrie* states that he has used three hundred ounces of the drug in fifty-six cases of mental disease in the insane asylum of Koenigslutter. He says that its systematic exhibition results in sleep at night and pacification by day. Motor explosions, he says, are suppressed

by sulphonal, and this accounts for some unpleasant phenomena occasionally observed such as staggering gait, vertigo, difficulty of speech and weakness of the extremities. Our own experience with it has been almost entirely limited to its use in gynecology, and in this class of cases it is the hypnotic *par excellence*. Most of these cases are characterized by increased reflex irritability, the result of an exhausted nervous system with complete inability to restore it by means of sleep. Opiates make these patients worse because they arrest the already weak digestion and thereby starve the nerves. Sulphonal, on the contrary, seems to have no bad effects beyond tranquilizing the excited sympathetic, as evidenced by slowing and weakening of the pulse. The only cases in which it must be administered sparingly or not at all are those in which there is a tendency to heart failure. Owing to its sparing solubility in water, viz., 1 in 120, and consequent slow absorption it is necessary to observe the following precautions: 1. Always prescribe it powdered; 2. It is preferable to order it to be triturated with equal parts of sugar of milk; 3. If not powdered or subdivided by means of an inert substance it must be administered from four to six hours before its effects are desired; for instance, if sleep is desired at ten p. m. it should be given at four in the afternoon. If the patient is only seen at night and the effects are desired as soon as possible it should be dissolved in boiling water, and a tablespoonful of whiskey should be added, which not only increases the dissolving power of the water, but also counteracts the depressing effect on the heart. In our experience a full dose of twenty-five grains is required to begin with, after which half a dose every afternoon or evening is generally sufficient to keep up the effect. It seems to be eliminated slowly from the system, for even after one dose the patient is generally drowsy for the few following days. On the whole we consider sulphonal

one of the most valuable remedies we possess, and especially suited to the new class of diseases evolved by 19th century civilization.

### BOOK NOTICES.

HEREDITY, HEALTH AND PERSONAL BEAUTY. By John V. Shoemaker, A.M., M.D., Professor of Materia Medica, Pharmacology, Therapeutics, and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital, etc. "The law of the wise is the fountain of life."—*Proverbs*. 8vo. Pp. 422. Philadelphia: F. A. Davis. Cloth. Price, \$2.50.

This work, by a very well-known medical author, is written rather for the general public than for the professional reader, and yet it contains much that will prove both instructive and interesting to the latter.

The author *apologizes* for its preparation by the remark "that there is among educated persons a generally confessed need of popular instruction as to matters of health, and of all things indirectly appertaining thereto; and this, in effect, is the concession of the existence of a considerable public need. There can be no dissent from the conclusion that the want arising from this need can be increased by perceptions aroused by such treatment of the subject of well-being as we have here endeavored to employ; that, in a word, supply will increase the public demand for instruction in this branch of knowledge. If, therefore, this work prove satisfactorily to have accomplished the purpose in view it will be gratifying, not otherwise, to find it receive a lease of life." The subjects of not a few of the chapters are quite unique, the titles often exciting an interest as regards their contents. The book deserves to become popular. The physician may derive great pleasure from a perusal of the work, and may gain much that will prove of use to him in his practice.

TEXT-BOOK OF HYGIENE. A Comprehensive Treatise on the Principles and Practice of Preventive Medicine from an American Standpoint. By George H. Rohe, M.D. Philadelphia: F. A. Davis, Publisher. 1890. Price \$2.50.

The aim of the author in writing this book has been to place in the hands of the American student, practitioner and sanitary officer, a trustworthy guide to the principles and practice of preventive medicine. He has endeavored to gather within its covers the essential facts upon which

the art of preserving health is based, and to present these to the reader in clear and easily understood language. A second edition of this work following so closely the first is sufficient evidence to indicate that its value has been appreciated. The present edition includes the advances made in sanitary science and art. Since the appearance of the first, additions will be found on almost every page, while many of the chapters have been entirely rewritten; the bulk of the volumes is increased by nearly a hundred more pages.

The work contains twenty-three chapters, each chapter being devoted to some subject pertaining to hygiene. For instance, Chapter I. treats of Air; Chapter II., Water; Chapter III., Food; Chapter IV., Soil; Chapter V., Removal of Sewage; Chapter VI., Construction of Habitations; Chapter VII., Construction of Hospitals; Chapter VIII., School of Hygiene. Other chapters treat of Military and Camp Hygiene, Naval Hygiene, Prison Hygiene, Baths and Bathing, Clothing, Disposal of the Dead, The Germ Theory of Disease, History of Epidemic Diseases, Antiseptics, Disinfectants and Deodorants, etc.

It is a valuable work and a copy of it should find its way on the shelf of every physician's library.

TWELVE LECTURES ON THE STRUCTURE OF THE CENTRAL NERVOUS SYSTEM, FOR PHYSICIANS AND STUDENTS. By Dr. Ludwig Edinger. Second revised edition with 133 illustrations. Translated by Willis Hale Vittum, M.D. Edited by C. Eugene Briggs, M.A., M.D., Professor of Mental and Nervous Diseases, University of Minnesota, etc., Philadelphia. F. A. Davis. Pp. xii-230, Cloth.

The anatomy of the higher nervous system is imperfectly understood by the student, and very often by the physician. The lectures of Edinger make this intricate subject highly interesting, and we do not hesitate to say that they are the best on the subject yet presented to the profession.

The advance in knowledge of the nervous system has been such during the past few years that the author has found it advisable to entirely rewrite many of its chapters for the present revised edition of this work. The energy in style so characteristic of the book in the original is not lost in the translation which is very well rendered. The marking of the various tracts and other portions of the nervous system with the terms which are used by our German colleagues is certainly a mistake in a book in which the text is English. With this exception nothing but praise is due to the author. The work, if carefully studied, will materially aid the student in the localization of brain affections.

**THE MODERN ANTIPYRETICS; THEIR ACTION IN HEALTH AND DISEASES.** By Isaac Ott, M.D. E. D. Vogel, Easton, Pa., 1891.

The author's desire has been to present new facts to the profession regarding the antipyretic drugs recently come into such general use, and hence the work is a resumé of the properties of the coal-tar products used in medicine. As the recent advances in therapeutics make the want of such a little volume felt, we feel sure the author has succeeded in filling the place previously left vacant. A brief perusal of the work will amply repay all.

**THE POCKET MATERIA MEDICA AND THERAPEUTICS**  
A resume of the action and doses of all official and non-official drugs now in use, by C. Henri Leonard, A.M., M.D., Professor of the Medical and Surgical Diseases of Women and Clinical Gynecology, Detroit College of Medicine. 300 pages, cloth, \$1.00 postpaid. 1891: The Illustrated Medical Journal Co., Detroit Mich.

Like the other works by this author, this one is characterized by terseness and compactness.

**WOOD'S MEDICAL AND SURGICAL MONOGRAPHS.**—Consisting of Original Treatises and Reproductions, in English, of Books and Monographs selected from the latest literature of foreign countries, with all illustrations, etc. Contents: Differentiation in Rheumatic Diseases (so called), by Hugh Lane, L. R. C. P. Mental Affections of Childhood and Youth, and other papers, by J. Langdon Down, M. D. Cure of the Morphia Habit, by Oscar Jennings, M. D. Notes on the Examination of the Sputum, Vomit, Feces, and Urine; by Sidney Coupland, M. D. Published monthly. Price, \$10.00 a year, single copies, \$1.00. May, 1891. New York: William Wood & Co.

The last article on the examination of the sputum, vomit, feces, and urine, is especially valuable and interesting.

**ACTION, THERAPEUTIC VALUE AND USE OF THE CARLSBAD SPRUDEL SALT (POWDER FORM) AND ITS RELATION TO THE CARLSBAD THERMAL WATER.**—By Dr. W. Jawowski, Demonstrator at the University Clinic of Prof. Korczynski in Krakow, with a Dietary by the translator, A. L. A. Toboldt, M. D., assistant Demonstrator of Pharmacy, University of Pennsylvania; editor *Journal of Balneology and Medical Clippings*, etc. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street. 1891.

As Carlsbad salt contains 43 per cent. of sulphate

of soda, 36 per cent. of bicarbonate of soda, and 16 per cent. of common salt, it is a valuable remedy in acid dyspepsia, in torpidity of the liver and in constipation. Dr. Toboldt gives us many valuable suggestions for its use, and also a carefully prepared dietary for this class of patients.

**MATERIA MEDICA AND THERAPEUTICS, WITH ESPECIAL REFERENCE TO THE CLINICAL APPLICATION OF DRUGS.**—By John V. Shoemaker, A. M., M. D., Professor of Materia Medica, Pharmacology, Therapeutics and Clinical Medicine, and Clinical Professor of diseases of the skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital; Member of the American Association, of the Pennsylvania and Minnesota State Medical Societies, the American Academy of Medicine, the British Medical Association; Fellow of the Medical Society of London, etc., etc. Vol. II of a Treatise on Materia Medica, Pharmacology, and Therapeutics. Being an independent volume upon drugs. Philadelphia and London: F. A. Davis, Publisher. Price cloth, \$3.50. Sheep \$4.00.

This volume has been expected for some time past, but has been delayed from various causes. It is a great improvement on its predecessor, because it is a complete work on therapeutics of drugs and chemicals. It is constructed much on the plan of Gubler's splendid work in French, which has always been our standard of what a work in Therapeutics should be, but which we have not heretofore seen in the English language. In this work under review the various drugs are arranged in alphabetical order, which is much better than under their classified order, as one can thus find any drug without referring to the index. The following is the arrangement: First the various synonymes; then the various preparations, then a description of the substance; then its pharmacology or method of preparation; then its physiological action is thoroughly described and this we consider one of the most valuable features of the work. After which follows the therapy, including the mode of administration and dose. The type and paper are good, and altogether the work is a credit to the author and publisher.

#### PAMPHILETS RECEIVED.

Additional facts regarding correct vocal training, by Eugene L. Crutchfield, M. D., Baltimore.

The application of vocal culture to the treatment of throat and pulmonary affections, by Eugene L. Crutchfield, M. D., Baltimore.

RESECTION OF THE OPTIC NERVE.—By L. Webster Fox, M. D. Reprinted from *The Medical and Surgical Reporter*, May 30, 1891. Philadelphia: Binder & Kelly, Printers and Publishers, 518-520 Minor Street.

A NEW OPERATION FOR PROLAPUS OF THE ANTERIOR VAGINAL WALL.—By Andrew F. Currier, M. D. New York. Read before the Section of Obstetrics and Diseases of Women at the meeting of the American Medical Association, at Nashville, Tenn., May, 1890.

CLINICAL CONSIDERATIONS CONCERNING ANEMIA IN YOUNG WOMEN, INCLUDING ITS TREATMENT.—Read before the Connecticut Medical Society, at its annual meeting in New Haven, May 29, 1890. By Andrew F. Currier, M. D., New York City. Reprinted from *The Times and Register* July 12, 1890. Philadelphia: The Medical Press Company, Limited, 1890.

Le traitement des suppurations pelvines et des lésions inflammatoires des annexes par l'hystérectomie vaginale. Par S. Pozzi, Professor agrégé à la Faculté de Médecine de Paris, chirurgien de l'Hôpital Lourcine-Pascal.

### PERSONAL.

Dr. Kirkpatrick has been appointed Assistant Surgeon of the Montreal General Hospital.

Dr. George E. Armstrong has been elected Surgeon of the In-Door Staff of the General Hospital.

Dr. McKechnie was recently appointed assistant attending physician to the Montreal Dispensary.

Dr. Neilson, of "B" Battery, Kingston, Ont., was in the city recently and favored us with a brief visit.

Dr. Geo. T. Ross, Professor of Physiology in Bishop's College, has removed to Dorchester street near Mountain.

Dr. F. R. England (Bishop's '85), has been elected attending physician to the Western Hospital, vice Dr. Trenholme lately deceased.

Dr. Fenwick has retired from active work on the In-Door Staff of the Montreal General Hospital, and has been placed on the consulting staff.

Dr. A. Laphorn Smith, one of the editors of THE CANADA MEDICAL RECORD, has been elected Professor of Gynecology in Bishop's College, to fill the vacancy created by the death of Dr. Trenholme, and the duties of which position he has been fulfilling during the last three years as lecturer.

Dr. F. W. Campbell, one of the editors of the RECORD, left early this month for his "Salmon" River at Metapedia, Que., where he will spend about three weeks.

Dr. Wolfred E. Nelson (Bishop's '72.) of New York City, paid Montreal a hurried visit, the end of last month. He came to attend the meeting of the Canadian Royal Society. Dr. Nelson was one of the first graduates of Bishop's College, and always retained a kindly feeling for his *Alma Mater*. We wish him long life and prosperity.

FOR ACUTE TONSILLITIS.—Sodii salicylatis, gr. v-x, every three hours, and for local application:

R.	Potassii chloratis,	q. s. ad. sat. sol.	
	Tr. ferri chlor.,	}	aa f ̄ ss
	Glycerini,		
	Aque,		

M. Sig.—Use locally.

FOR ACUTE GASTRITIS.—1, Absolute rest for stomach. 2, Nutritive enemata. 3, To quiet stomach.

R.	Hydrarg. chlor. mitis.	gr. ij
	Bismuthi submit,	3 j

M.—Ft. chart No. xx. Sig.—One powder every four hours.

Or—

R.	Acid. carbolic,	gtt. iv
	Sodii bicarb.,	5 j ss
	Elixir,	f ̄ ss
	Aque,	q. s. ad. f ̄ iv

M. Sig.—5 j every three hours.

4, Opium, hyoseyamus or assafetida by suppository for nervous symptoms. 5, Counter irritation over epigastrium

Give nothing by mouth, except for its local action on the stomach.

Especially avoid all purges. If one is necessary, use calomel.—*Times and Register*.—*Col. Med. Journal*.



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## Original Communications.

### APPENDICITIS—OPERATION—DEATH ON THE TENTH DAY.

By GEO. E. ARMSTRONG, M.D., Instructor in Surgery, McGill University; Surgeon to Montreal General Hospital.

F. S., aged 30, consulted me about April 15th for a chronic, persistent diarrhoea, from which he said he had suffered for about fifteen years. Loose, watery, mucus stools; colicky pains, and also a pain in right hypochondriac region. He had previously been under my care for diarrhoea in 1884 and 1885. For about six years I had not seen him.

On examination, I found the abdomen flaccid and compressible over the left two-thirds. The right third was tender and painful, and a hard, well-defined mass could be distinctly outlined in region of ascending colon. Pain first felt at beginning of year. I advised him to enter the Montreal General Hospital with the view of having further advice, possibly an exploratory incision. Has lost 13 lbs. in weight since January, 1891. During the next two weeks the condition of the right side changed very much. There evidently had started up a fresh and active inflammatory process; so much so that when seen in consultation by Drs. Geo. Ross and

Shepherd on his admission to hospital the right side of abdomen and right lumbar region were so tender that anything like a satisfactory physical examination without an anæsthetic was out of the question. He walked with difficulty. He was considerably emaciated. Had never been confined to bed. He was a printer by trade. Had inflammation of lungs and scarlatina in childhood. Father died of gout at the age of 69; mother and one sister and one brother are alive and well.

On the 1st May, 1891, assisted by Dr. Shepherd, I made a lateral incision on the right side, over the tumor. On entering the peritoneal cavity I was for some minutes puzzled to make out what the condition of things was that I was to deal with. In the iliac region the omentum was closely adherent to the parietal peritoneum to the right of the cæcum and below. Above I could pass my finger around into the right loin and determine that the kidney was normally placed and not adherent to the tumor. The liver and gall-bladder could be also excluded. I then carefully separated the omentum from the parietal peritoneum to the right of and below the cæcum. The walls of the cæcum were thickened and covered with inflammatory tissue. The appendix was with difficulty recognized, as its walls were ex-

tremely thickened and oedematous, and its base of attachment to caecum fully one and a half inches broad. I now carefully separated the adhesions on the right side of the caecum which bound it down to the iliac fossa, when I came upon a sac whose anterior wall seemed to be made up of purely inflammatory tissue. Fluctuation in this sac was obtained, the needle of a large hypodermic syringe introduced, and thick pus withdrawn. I then enlarged the opening and evacuated nearly a pint of thick pus having a distinctly faecal odour. On exploring this cavity it was found to extend downwards below Poupart's ligament, and above as far up as the diaphragm. The cavity was thoroughly irrigated with boiled water and two rubber drainage tubes inserted, one reaching to the upper and one to the lower limit of the sac. The abdominal wound was then closed with silk-worm gut sutures.

On dressing the wound on the third day gas was noticed escaping, and on the fourth day faecal matter escaped.

On the sixth day there occurred a marked elevation of temperature, and on examination of lungs, percussion dulness was found over right apex, extending down as low as lower border of third rib. There was increase of vocal fremitus, and loud coarse mucus râles were heard over this area.

Death occurred on the tenth day after operation.

This case has many features of unusual interest; in some respects resembling a case reported by Dr. William Gardner. I am not at all sure that the case can correctly be entitled one of appendicitis. I regret that no autopsy was obtained to clear up the case. The history is rather one of chronic colitis, probably tubercular. There is no history of a recurring subacute appendicitis, much less of an acute attack. *He had never been confined to his bed before admission to the hospital.* At the operation the appendix was not, apparently, more in-

volved than the posterior wall of colon. The pus was entirely retro-peritoneal. I think it quite likely that tubercular ulceration took place in the caecum or appendix, or both; that there was excited in their peritoneal coverings an inflammatory action that resulted in the union of the vesical peritoneum of the caecum or appendix with the parietal peritoneum beneath. The ulcerative action continuing, perforation occurred, and escape of pus or possibly a small amount of faecal matter into the subperitoneal tissue, where suppuration continued until the large cavity described above was formed.

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## Society Proceedings

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### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

*Stated Meeting, April 3rd, 1891.*

F. J. SHEPHERD, M.D., PRESIDENT IN THE CHAIR.

Dr. Lapthorn Smith exhibited the following pathological specimens:—

1. *Small Cystic Ovary.*—The patient had been a sufferer for many years with pain in the left side and severe palpitation. Dr. Smith had tried every form of treatment without being able to give her any relief. He then concluded to operate. The appendages were removed, with the result of immediate improvement of her symptoms—the pain disappeared, and she was free from attacks of palpitation.

2. *Double Pyosalpinx.*—This patient was aged 33, married twelve years, and the mother of one full-grown child eleven years ago. Her labor had been difficult, and she had been in bad health ever since. She had recurring attacks of pelvic peritonitis yearly for the past ten years. For the last two years her menstruation had been profuse. On examination, the ovaries and tubes were felt bound down in Douglas' cul-de-sac, and were excessively tender. Removal of the appendages had been advised, and the operation was performed by Dr. Smith, assisted by Dr. Armstrong. The tubes, which were exhibited, were enormously distended with pus. Up to the present time the patient was doing favorably. Dwelling upon the causation, Dr. Smith mentioned the probability of a septic metritis and salpingitis following her confinement eleven years ago. The recurring attacks of pelvic peritonitis could be attributed to the oozing out

into the pelvic peritoneum of the pent-up pus in the over-distended tubes.

Dr. Shepherd exhibited the following

#### ANATOMICAL VARIATIONS.

1. *The left four-foot of a pig with six toes.*—The reproduction of the thumb was interesting, for the trapezium, which in the pig's foot is in a rudimentary condition, was here developed to its full size. In both the accessory toes there were three phalanges, thus differing from the ordinary first digit of the five-toed mammals with only two phalanges.

2. *An unciform bone with the unciform process separate and evidently having an origin from a distinct centre, as there were no evidences of fracture.*

3. *An Indian skull with a well developed supra-occipital or rather inter-parietal bone, as is seen in many lower animals.* The portion of bone above the superior curved line was separated from the rest by a suture running across from one lateral angle to the other.

*New Methods in the Treatment of Granular Ophthalmia.*—Dr. F. Buller followed with a paper of considerable interest on the above subject.

*Discussion.*—Dr. Foucher considered Dr. Buller's paper of interest to all, as it related to one of the severest diseases connected with the eye commonly met with. Before such remedies mentioned by Dr. Buller were adopted, cases presenting themselves for treatment in our hospitals increased in numbers owing to the inefficient methods then at the disposal of the specialists. The susceptibility of some individuals to trachoma more than others was difficult to explain. He had frequently noticed granular lids in patients with atrophic rhinitis. Was there any connection between these two diseases which somewhat resembled one another pathologically? Did tuberculosis predispose to granular ophthalmia? In the treatment he considered jequirity of great value, as well as corrosive sublimate, in suitable cases.

Dr. Proudfoot had discontinued the use of inoculating with pus cases of granular ophthalmia since the introduction of jequirity. He has been in the habit of using the freshly powdered bean. If within forty-eight hours there was no inflammation, he washed out the sac. He had also employed caustic potash with great care, neutralizing the effect with a weak solution of vinegar. He found corrosive sublimate in the strength of 1 to 5000 beneficial when used frequently.

Dr. Shepherd asked if sulphur had been tried in those cases where corrosive sublimate failed. It was known to act well in diseases of the skin.

Dr. Buller, in his reply, remarked that he saw no analogy between tuberculosis and trachoma. That trachoma was due to a specific diplococcus, cultures of which had been found to produce

the disease. He was not aware that sulphur had been used in these cases. He considered scarification very valuable in recent cases with much swelling.

*Stated Meeting, April 17th, 1891.*

F. J. SHEPHERD, M.D., PRESIDENT IN THE CHAIR.

*Chronic Ovaritis in Cases with unusual Nervous Symptoms.*—Dr. Alloway showed specimens from three cases of chronic ovaritis. The ovaries and tubes exhibited were removed for the relief of unusual nervous symptoms. The first case was 30 years of age; three full-term children; menstruation had been very irregular. A year previous she had a trachelorrhaphy performed for laceration of the cervix, which improved her in general health for some months; but the following nervous symptoms remained and continued to become exaggerated: constant headache, vertigo, exaggerated hysterical symptoms, chiefly in the form of a feeling of irresponsibility for her acts, great cardiac excitability, insomnia, and pelvic pain. Since the removal of the appendages these symptoms have disappeared, and the patient has assumed altogether a different condition.

The next specimen exhibited by Dr. Alloway was the appendages removed from a lady 40 years of age. She had been married twenty-one years. Four full-term children; youngest 14 years of age. Menstruation had been very irregular, severe pelvic pain, constant vomiting, which seemed to be of a reflex character and unaccompanied by nausea, constant headache, hysterical attacks were very violent, requiring severe measures to suppress them, and were followed by these attacks of vomiting before mentioned. This patient had been under every possible treatment for years without relief. At the operation, the ovaries and tubes of both sides were firmly adherent to the pelvic wall, and were with much difficulty separated on account of the age of the adhesions. This patient has not had a single attack of vomiting since the operation, and in other respects is thoroughly restored to health.

The third specimen exhibited by Dr. Alloway was the appendages from a patient of 29 years of age, unmarried. Her principal symptoms consisted in an inability to digest ordinary food for the past two years, the smallest quantity causing intense gastralgia, followed by painful and loud eructations of gas and enormous distension of the large and small intestines, giving appearance to the so called phantom tumor. This tumor would gradually disappear towards evening, to reappear again the following morning accompanied by very loud borborygmi. This patient had had every possible form of treatment, including the washing out of her stomach; had lived on milk diet for months at a time without

any benefit. The appendages were removed and found extremely small and cirrhotic; they were formed of unruptured cysts and fibrous tissue. Since the operation this patient has had no distension of the abdomen nor dyspeptic attacks. She takes ordinary food without any inconvenience, and has no hysterical symptoms whatsoever.

Dr. Alloway said that he exhibited these specimens to show that hysterical symptoms accompanied by reflex phenomena relating to disease of other organs were really due to organic disease of the sexual organs; and that chronic ovaritis, due to past attacks of scarlet fever or smallpox, was invariably found on operation. This variety of disease was called by Tait exanthematic ovaritis, and was more prevalent than the profession generally suspected.

*Uterine Fibroid Removed by Abdominal Hysterectomy.*—Dr. Laphorn Smith showed this specimen, which was about the size of the head of a new-born child. He said that he had performed this operation with great reluctance and only at the urgent solicitation of the patient and her friends. She was 35 years old, and had always had regular menstruation, but four years ago she had begun to flow profusely, and her periods became extended to fourteen days, gradually growing more and more profuse until she had to be tamponed and confined to bed. About two years ago she had ten applications of electricity in Minneapolis, according to Apostoli's method, but owing to her intolerance of it and the impossibility of introducing the platinum sound through the several sharp curves of the uterine canal she only received very small intensities, and the benefit was in proportion. She was, however, so much improved (losing about half as much blood and for about half the length of time that she did previously), that she returned to her arduous duties as principal of a school. After a winter's work she began to suffer again from dysmenorrhœa and menorrhagia, and when she placed herself under his care last fall she was losing for fourteen days every month. He was unable to introduce a platinum sound, and was obliged to invent an instrument for her case—namely, a soft elastic bougie covered with aluminium wire—which he was able to introduce a distance of  $4\frac{1}{2}$  inches, and by means of which he was able to go as high as 100 mm. She improved so much after fifty applications that the flow was only profuse for two days, and was over in five or six. She then went down to New Brunswick on a visit, where the periods continued to be less and less, and when she returned to Montreal a week ago she appeared in perfect health. Although all the cases which have improved under Apostoli's treatment had maintained their improvement, some after several years, yet Dr. Smith, on being asked, could not promise his patient that this would be the case with her. He advised her to return home, and

if her improvement should not prove to be permanent, to return for operation next summer. The patient, dreading a return, requested that an operation should be performed immediately. Dr. Smith informed her that the only operation which would guarantee her against a return of the bleeding was a radical one—namely, the removal of the tumor with the uterus and its appendages, which he considered very little more dangerous than the removal of the appendages alone. Five days ago, with the assistance of Dr. Armstrong and of Dr. Spendlove (who gave the anæsthetic), he performed abdominal hysterectomy, removing the whole of the tumor and all of the uterus and appendages except a piece of the cervix, which was left for a stump. In order to lift the tumor out of the very small opening which he purposely made, he screwed into it a silver-plated cork-screw, which enabled Dr. Armstrong to lift it out without any effort. So far the temperature has not reached 100°, the only *contre-temps* being the oozing of about eight ounces of blood from the stump owing to the *serre-nœud* having gone to the end of its tether, so that he was obliged to place another *serre-nœud* around the first, which arrested the oozing. The stump came away on the fourteenth day, and there was every prospect of her making a good recovery.

Dr. Armstrong, dwelling upon reflex symptoms mentioned in Dr. Alloway's cases, considered that removal of the distal cause, when practicable, would necessarily tend to alleviation of the symptoms. Referring to hysterectomy, he questioned the propriety of submitting a woman to hysterectomy in cases where removal of the appendages would give relief. In the former the mortality was high, whereas in the latter the death-rate was low.

Dr. Mills said that the sexual organs played a great part in the reflex symptoms. The removal of the ovaries or testicles in an animal arrested its development. The moral, mental and even the physical life changed. In man these changes were not so marked, yet we had sufficient evidence to show that a centre could be, as it were, thrown out of balance by over-stimulation of an afferent nerve, whereby the physical life became disorganized. He hoped that gynaecologists and obstetricians would be able to trace out the paths of these disturbances.

Dr. Alloway thought that the appendages in Dr. Smith's case might have been removed for a tumor of the size mentioned. He was of the same opinion as Tait in not performing hysterectomy when the appendages could be removed, which could be done in the majority of cases.

*Necrosis of the Bladder.*—Dr. F. A. L. Lockhart followed with a paper on this subject.

Dr. Johnston had been interested in reading an article on the above subject from Dr. Haultain of Edinburgh. He was not inclined to consider this a special form of necrosis of the

bladder in contra-distinction to other diseases of the bladder, such as diphtheria and cystitis, which are also a kind of necrosis.

*Stated Meeting, May 1st, 1891.*

F. J. SHEPHERD, M. D., PRESIDENT, IN THE CHAIR.

Dr. G. G. Campbell was elected a member of the Society.

*Multiple Epithelioma of Oesophagus and Stomach.*—Dr. Johnston exhibited this specimen, which had been obtained at the autopsy from a patient who had recently died in the hospital. It was a very unusual condition. Two epitheliomata were found high up in the oesophagus, whilst within the stomach, close to the oesophageal opening, was another tumor. The liver contained two large tumor masses and two smaller ones; the former were broken down in the centre. They differ in their microscopical appearances from those found in the oesophagus and stomach. The cells were not arranged in nests, but in alveoli. It was very difficult to say which was the primary tumor. But few of these cases had been reported.

*Brain Tumor.*—Dr. Johnston showed this specimen for Dr. Stewart. The growth was situated at the base of the brain, and occupied the position of the pituitary body, involving the optic nerves and optic commissure. The lateral ventricles were considerably distended, and covered with minute granulations produced by a thickening of the lining membrane from chronic distension. The tumor extended into the third ventricle. There were considerable areas of necrosis and fatty degeneration. From the microscopical appearance, the growth was pronounced a teratoid tumor, not uncommon in that region.

Dr. James Stewart remarked that the patient, whom he had seen, had been admitted to the hospital under Dr. Buller. He complained of failing vision, severe headaches, vertigo, and vomiting. There was double optic neuritis, which went on to complete blindness. He had ptosis of the right lid, and the head inclined to the right side. There was no history of syphilis. The symptoms were those of a gross lesion in the brain. Nothing pointed to the localization or nature of the tumor.

*Cardiac Thrombus in a Case of Pneumonia.*—Dr. Finley related that the patient from whom this specimen had been obtained was a man, 46 years of age, who, in 1889, had had a pleurisy which had lasted six weeks. On the 7th of February of this year the patient was taken ill with pneumonia. The fever disappeared on the tenth day, and he was apparently progressing favorably. A week later the patient was seized with a malarial-like attack. The chills were of a marked intermittent type, recurring at inter-

vals of twenty-five hours. He had never had malaria, and had not lived in a malarial district. Dr. Finley was at a loss to explain their causes. The patient died from heart failure on 23rd March. At the post-mortem examination the right pleura was found greatly thickened. There was a localized pleurisy, with some effusion at the base of the right lung; the lung itself was in a condition of resolving pneumonia. Fraenkel's micrococcus of pneumonia was found. The examination of the heart was interesting from the presence of a large thrombus in the right side of the heart, which projected upward into the auricle; the valves beneath were perfectly healthy. Sections of the thrombus were made, but no bacteria were found.

Dr. Geo. Ross remarked that he had seen the patient on two occasions. At his first visit he had found him in one of those rigors mentioned by Dr. Finley, which was very violent, and very much like the chill of ague. At his next visit the patient was apparently well, pulse quiet, and temperature normal. There were physical signs of consolidation at the base of the right lung. The appearance of the ague-like attacks at a time when the patient should be recovering from pneumonia was very perplexing. The possibility of its being accounted for by septicæmia was negatived by his good condition in the intervals. Malignant or ulcerative endocarditis, which has often been mistaken for ague, could also be excluded from the absence of a heart murmur. It was difficult to offer an explanation.

*Ulcerative Endocarditis.*—Dr. F. R. England, who reported the case, remarked that the patient, a man aged 36, employed as a locomotive engineer, had been in good health until two and a half years ago, when he suffered from an attack of articular rheumatism with endocarditis, which kept him in bed for four weeks. There was at that time a soft blowing murmur transmitted down the sternum and upwards along the vessels into the neck. He recovered and remained well until the winter of 1890, when he suffered from a dry, harsh cough, which disappeared in the spring. The cough returned again last winter, and impaired his health considerably; he lost weight and complained of night sweats. The loss of a child about this time preyed heavily upon his mind. He persisted in going to his work until the 10th of March, when Dr. E. was called to see him. He complained of cough, great weakness, and pain in the left lumbar region on deep inspiration or movement. His temperature was 101°F.; pulse quickened. There was no evidences of disease in the heart or lungs. For six days of the illness the temperature ranged between 100° and 101°. The nervous prostration, the profuse sweats, together with the persistence and severity of the lumbar pain, lead Dr. England to believe that the trouble was probably

rheumatic. After the tenth day of the illness a harsh, double aortic murmur developed, with visible pulsation of the head and neck and smaller arteries. A congestive bronchitis appeared, and the patient became weaker and restless. The temperature varied between 99° and 101°; respirations 36 to 46, and pulse from 96 to 120 throughout the disease. No palpitation, or pain over the cardiac region, was at any time complained of. There were no rigors. Rheumatic pain and tenderness developed in the right shoulder, lasting for a few days. The patient died suddenly from heart failure on the forty-fourth day of his illness. Dr. Geo. Ross, who had seen the patient in consultation ten days before death, was strongly inclined to consider the case as one of malignant endocarditis.

Dr. Johnston, who exhibited the specimen for Dr. England, said the heart showed extensive acute endocarditis of three segments of the aortic valves, with large vegetations upon their free edges. Besides the recent endocarditis, the valves showed signs of old chronic endocarditis. Fusion of two of the segments of the valves had occurred, which was not uncommon in ulcerative endocarditis. A perforation was noticed directly in the middle of a segment with complete destruction of valve tissue at that point. The perforation was plugged with fibrin which prevented any leakage when water was poured upon the valves. This, Dr. Johnston suggested, might explain in some cases the disappearance of a murmur. The streptococcus pyogenes was found.

Dr. Geo. Ross considered the case of clinical interest. The prostration noticeable in this malignant disease was an important point. Another point was the different phases in the temperature curve; few diseases were so deceptive in regard to the temperature curve. Dr. England's report places another case on record where a heart already the subject of endocarditis subsequently becomes the subject of ulcerative endocarditis.

*The Bacilli of Diphtheria.*—Dr. Wyatt Johnston exhibited cultures of the Klebs-Löffler bacilli obtained from a case of diphtheria. The bacteriological examination of the diphtheritic membrane, as recommended by Roux and Yersin, was likely to prove of great practical diagnostic value in doubtful cases, as a positive diagnosis was possible within twenty-four hours. The appearance of the bacteria and their mode of growth were quite characteristic. Portions of membrane intended for examination could be sent dry in clean glass or between folds of blotting paper or cotton. In three cases of genuine diphtheria these characteristic bacilli were found in large numbers, while two other cases with a suspicious looking exudation on the tonsils were free from them, and proved to be simple cases of tonsillitis. One case where a peculiar fibrinous false membrane had formed in the nose, and a

case of membranous conjunctivitis, were free from the diphtheritic organisms. Dr. T. M. Prudden's experience with what seemed to be cases of genuine diphtheria, where the bacilli were uniformly absent, was unique, and not borne out by his later results. It was probable that a certain proportion of primary acute inflammations of the throat, characterized by the presence of what was anatomically diphtheritic membrane, was due simply to septic organisms, such as the streptococcus pyogenes.

*Discussion.*—Dr. A. D. Blackader had translated (some twelve months ago) an article on this important subject from *Le Journal de L'Enfance*. He had been surprised at the results obtained by Prudden on his first investigation for the Klebs-Löffler bacillus. It was evidently the ptomaines which produced the poisonous effects.

Dr. Geo. Ross remarked that it was of great importance in doubtful cases to arrive at just conclusions. From recent work more than one disease was shown to be characterized by the formation of membrane. In two cases which had recently come under his notice in the General Hospital, one was a young child with a suspicious-looking follicular tonsillitis which was examined for the Löffler bacillus, but none were found; the other case was admitted for quinsy, and when first seen by him the patient had had rigors and complained of severe pain at the angle of the jaw, with difficulty of swallowing. The tonsils were considerably swollen, and a suspicious, small fibrous patch was noticed on the uvula. The next day the patch had extended, and he felt quite sure that the case was one of diphtheria. Dr. Johnston took a culture from the patient's throat, which showed the Löffler bacillus abundantly. The most extravagant views were held upon the subject of diphtheria. Dr. Jacobi looked upon all cases of tonsillitis as diphtheria. The only way that such views can be positively disproved, will be by bacteriological examination.

Dr. Buller remarked that when true diphtheria attacked the conjunctiva, the local symptoms were very severe, and always sufficiently well marked to make easy the elimination of other diseases characterized by the formation of false membrane.

Dr. Birkett stated that a case which had come under his notice, and which had been mentioned in Dr. Johnston's report, had somewhat of a diphtheritic appearance. A yellowish, thick, pseudo-membrane was found loosely attached to the septum of the nose, which, however, could be removed without bleeding. The larynx presented a similar condition, and the tonsils were swollen. The patient evidently got well three weeks after, before the membrane disappeared from the cords. The Klebs Löffler bacillus was not found.

Dr. Wilkins referred to the difficulty, at

times, in the diagnosis of follicular tonsillitis from diphtheria, and *vice versa*. A case which he had lately seen presented all the appearances and symptoms of a follicular tonsillitis, which he would have pronounced as such but for a small suspicious patch on the side of the uvula. The case proved to be one of diphtheria.

Dr. England mentioned the case of a child whom he had seen with a temperature of 101° F., glands swollen at the angles of the jaw, and both tonsils covered with white membrane. The case looked very much like diphtheria. In three days the membrane had all disappeared and the child was better. Another child in the same family was similarly affected, but in this case a large cervical abscess formed. The mother of these children was also taken ill shortly afterwards; membrane appeared on both tonsils, temperature rose to 101° F., and she was considerably prostrated. He questioned whether these were cases of true diphtheria, and was more inclined to consider them cases of septic sorethroat, as mentioned by Dr. Johnston.

#### *Stated Meeting, 15th May, 1891.*

F. J. SHEPHERD, M.D., PRESIDENT, IN THE CHAIR.

Dr. G. Laforest was elected a member of the Society.

#### *Combined Lateral and Posterior Sclerosis.*—

Dr. J. Stewart exhibited this case. The patient, a man aged 42, first showed symptoms of his trouble two years ago, in the form of weakness, stiffness, and difficulty in walking and standing, especially when the eyes were closed. When he came under observation two months ago, there was paresis of the lower limbs with marked ataxia and increased knee jerks. It was noticed, however, that in the course of the following month the knee jerks gradually diminished, and were now completely absent. This was considered to be evidence pointing to the extension of the degenerative process from the postero-internal to the postero-external columns.

Dr. James Stewart read the notes of a similar case which had been under his observation at the Montreal General Hospital for a period of some weeks two years ago. The patient was 43 years of age, and presented the characteristic symptoms of combined lateral and postero-internal sclerosis. The patient died from erysipelas.

Dr. Finley, who performed the post-mortem, was able to demonstrate the existence of degeneration of both the lateral (crossed pyramidal) and postero-internal fibres.

Dr. Roddick inquired as to the cause.

Dr. Elder asked, if a case be seen early, what symptoms would lead to a diagnosis between postero-lateral sclerosis and tabes?

Dr. Stewart, to Dr. Roddick's question, re-

plied that the patient had a history of syphilis, which he believed to be the cause. To Dr. Elder he answered that in tabes the knee-jerk was invariably lost, besides the presence of the Argyll-Robertson pupil, and lightning pains.

*Pericarditis.*—Dr. Finley exhibited this specimen for Dr. Wilkins. The pericardial sac contained a large quantity of pus. The inner surface was covered with lymph and some fibrinous adhesions between the visceral and the parietal layer. The outer surface was also involved. The left lung was found glued to the pericardium. The endocardium was healthy. The chief point of interest was that the lesion was primary, there being no history of Bright's disease or rheumatism.

*Appendicitis.*—Dr. Armstrong read a paper on this subject from a case in practice.

*Discussion.*—Dr. Hingston was doubtful as to the case being one of appendicitis. He had seen more than one case of appendicitis, when on the eve of an operation there would be a discharge of the pus. He thought that in such cases the pus emptied more frequently into the bowel.

Dr. Johnston had found pus in the retro-peritoneal region, the result of an appendicitis,—a large peri-nephritic abscess which he believed at first to be connected with the kidney, but on careful dissection, a narrow sinus was found leading down to a perforated appendix which lay behind the cæcum.

Dr. Shepherd had seen the case reported by Dr. Armstrong and was still of the opinion that the case was one of appendicitis. The appendix had been found bent on itself and closely attached to the posterior wall. It had perforated beneath the iliac fascia and extended upwards.

*The late E. H. Trenholme, M.D.*—The following resolution of regret was proposed by Dr. Hingston, seconded by Dr. Armstrong, and carried:—

"That this Society has learned with regret of the death of Dr. E. H. Trenholme, for many years a useful and active member: That it records its sense of his ability as a gynaecological surgeon and as an original observer."

Prof. Keen selects the following points for the passage of the needle in the operation of paracentesis. In paracentesis thoracis the place of election is between the eighth and ninth ribs in the line of the axilla. In paracentesis abdominis the needle should enter in the middle line, the patient being in a sitting posture and the bladder having been previously emptied. In paracentesis pericardii the patient should be in the recumbent posture and the needle should enter at the fifth interspace in front, due regard being had for the heart and large vessels.—*Col. and Clin. Record.*



## Progress of Science.

### THE PRESENT STATUS OF ABDOMINAL SURGERY. \*

By Joseph Price, M.D., Philadelphia, Pa.

The progress of abdominal and pelvic surgery has so far advanced within the last decade, that, from occupying a doubtful position both as to practicability and justifiability, it is now recognized as holding easily the vantage ground of both refinement and attainments. It has vanished opposition and won over its opponents; it has grafted its exact methods of procedure upon all other branches of surgery, and so lent its refinements to their advantage; and lastly, it has, by overthrowing traditions and fables of surgery, given valuable aid in the line of therapeutics in determining where surgery must begin and medicine end in a line of diseases hitherto considered almost entirely outside the domain of else than physic.

I have deemed it fitting to discuss this subject here at this time because, here in the person of Ephraim McDowell in Rockbridge county, abdominal surgery was born more than a century ago. Born in Virginia; buried in Kentucky; his resting place is marked by a shaft of Virginia granite; but the monument of his fame is everlasting, though the inscription thereon be effaced and the granite crumble in that dying womanhood and suffering humanity, to the end of time, must rise up and call his genius blessed, that has delivered them.

The question is often propounded at the present day. "To which branch of surgery must be accorded the first place? which branch is most indebted to the others for its advancement? in which are the most difficulties to be anticipated during the progress of an operation?" Now, it is easy in any specialty to set up and defend a number of points, from which it would appear that this or that specialty may claim prominence. It is easy for the general surgeon to say that in the vast variety of accidents and pathological processes met variously in the body, the difficulties of general surgery are easily in the van. The argument is however fallacious, for though the number of organs and parts dealt with by the general surgeon may, for the sake of arguments, be granted to be greater, nevertheless, the relations of these parts, on the average, is not so intimately concerned in the vital processes, as those of the abdomen. To ligature an artery, carotid or femoral outside of the body, easily exposed and kept so, is an altogether different matter from tying a vastly smaller one in the pelvis. The methods of procedure in all the ordinary surgical operations, major or minor,

are for the most part a matter of accepted method from the well-known relations of the parts. In abdominal and pelvic work, however, routine—except in reference to instrumental preparation and cleanliness—is not possible, for no operation can be taken as a type of any other, and the complications of one cannot be estimated by the accidents of another. The only thing to rule out failure is to be prepared absolutely for anything, from complete packing of the pelvis to control hæmorrhage, to the resection of intestine, removal of kidney, or the uterus.

With this understanding of abdominal surgery, it is not difficult to see that what promises to be the simplest operation may turn out the most difficult, and that the terms are only of an average; the requirements of this branch of surgery are *facile princeps* in requiring a special training and its difficulties especially its own. To say that a general surgeon without such training can do such work, is to argue that he can just as well do eye work or brain surgery. That now and then a general surgeon has excellent results in this special work, is no more argument than special surgeons are not required in it, than to hold that because Blind Tom has mastered the technique of music without lesson or instruction, he is not an idiot, and there is no science of music. It is clear then that the work of abdominal surgery is distinctive. Let us now consider briefly the procedures pertaining to it, and the approved methods of dealing with the many pathological conditions encountered.

We may start with *pelvic abscess*. Here the radical abdominal interference is especially to be compared with the old (and by some still followed) method of vaginal puncture. Vaginal puncture is a dangerous procedure, in that it cannot be told what organs are involved in the abscess wall. The abscess again may be multiple, and therefore, puncture will only open a single cavity, and may leave three or four untouched, and the difficulty of the case be left unsolved. To say that these abscesses are often outside of the peritoneum is no argument against the abdominal operation at all, for if this is true, careful manipulation may evacuate the pus entirely without opening the peritoneum. Again, it is to be remembered that nearly every case of so-called pelvic abscess takes its origin from a diseased tube or ovary. This being the fact, it is apparent, that the absolute removal of the focus of the disease is the only way of effecting a cure. The tediousness of the healing process by the method of puncture, is so well appreciated in even the most uncomplicated cases that this alone is a most telling argument against it.

At the present time, *operations for the removal of cancerous or myo-fibromatous uteri*, are claiming especial attention, for the reason that when first originated these operations were regarded with especial disfavor on account of their primary mortality. It is not my purpose to

\* [Reprinted from Transactions, of the Medical Society of Virginia, 1890.]



speaking especially of the removal of the uterus for cancer, but to consider the operation as necessitated by myomatous or fibro-cystic tumors. Experience has amply shown that this latter operation, carefully performed, so as completely to shut off the peritoneal cavity from the surrounding tissues, a technique which must be freed from every loophole of error, is at once the key to the operation and the salvation of the patient.

Another feature of the operation is the use of the clamp, or *serre-nœud*, as the great essential in the instrumental technique of the operation. This fact is especially interesting from the fact that certain sentimental surgeons at once insist upon the barbarousness of the instrument, and claim that if the operation is to stand, an intra-peritoneal method of treating the stump must be devised. The line of argument in a life-saving operation that would insist upon the abandonment of an instrument simply because, from their ultra ideas of refinement, it is "barbarous" we suppose would refuse succor in a storm, because the boat savored of fish. Plainly to the clamp belongs the credit of giving to hysterectomy its acknowledged position as a justifiable surgical procedure. By its use I have now completed a series of *twenty-seven hysterectomies without a death*. The course of the operation was smoother than the average ovariectomy, and gave me less concern, because I had the danger point under my eye all the time. I am morally sure that if hæmorrhage occurs I shall see it and when seen, it is easily controlled. Herein lies the value of the clamp, and at this stumbling-block the intra-peritoneal methods of dealing with a stump often as big as a thigh must be uncertain and therefore dangerous. To say that suture and ligature, inasmuch as they control hæmorrhage elsewhere, will do it here, is to argue without a due appreciation of the facts, or a very limited experience; and just here the general surgeon falls short. There are many stumps that will not safely hold a ligature, and even when they do, the danger from after-shrinkage is so great that it is not by any means certain that the ligatures employed will not altogether fail.

The *method of making a stump* is one not to be easily described, nor is it uniform. Each stump must be made according to the exigencies of the case. The general rule is to free the bladder, save the peritoneum dissecting out the tumor until sufficiently free to engage it with the clamp. The after technique involves the closure of the pelvic peritoneum, and the embracement of the stump by the parietal peritoneum so as to close off the peritoneal cavity absolutely.

Following closely in importance for the relief of uterine fibroids of a myomatous nature is the *removal of the appendages*. When this is possible, the relief afforded is, in most in-

stances, immediate and permanent. It must not be premised, however, that the removal of tubes and ovaries, in cases of uterine fibroid, has its counterpart in the operation under the simpler pathological conditions. In the latter, it is often the easiest of the easy operations; in the former, it frequently becomes a most serious undertaking—often is impossible, eventuating in hysterectomy in cases where such a conclusion was considered the remotest of contingencies, if considered at all. This is another illustration of the complexity of abdominal work. The mortality in removal of the appendages in uncomplicated cases of fibro-myomata should be about *nil*. The mortalities of dabblers in abdominal surgery have no right to be considered. Closely related, in a clinical light, as dealing with the uterus, are the *Porro Cæsarian operations*. These, of course, have an obstetric relation, and in many points must be so considered, so far as their necessity is concerned. The average obstetrician is however, far from being prepared to perform either of these operations; and hence they will fall, in most cases, into the hands of the abdominal surgeon. As an operation of utility—*i. e.*, accomplishing its purposes and removing a chance for the necessity of re-operating, the Porro is to be preferred. In addition, with the perfected method of doing hysterectomy, it is, I believe in competent hands, much the safer operation, though, so far as statistics are concerned, this is, perhaps, open to question; but, all things considered, as I have shown in a previous paper, the Porro operation should be the safer operation, and I have no doubt it will ultimately be so recognized.

The *Cæsarian section*, simplified and perfected to conform with the modern surgery of the abdomen, is outside of the unfavorable conditions for perfect suture of the uterus—a simple operation—so much so that it has been sought after as a cheap means of advertisements of late years in many cases in which it was not at all justifiable.

*Ectopic pregnancy* may be considered at this time as related indirectly with the uterus. That is, there are uterine symptoms in connection with it. These are not, however, in any sense pathognomonic of pregnancy, and may be simulated by various pelvic pathological conditions. So far as the diagnosis is concerned, I shall not argue the question farther than to say that out of an operative experience of over thirty-eight cases in which its existence was proved in every case beyond question. I have so often been deceived or in doubt, that I cannot, for an instant, agree with those who insist upon exact and positive diagnosis in this most serious of the abdominal pathological conditions. I have not, it is curious to remark, observed a so-called intra-ligamentous variety of this condition, and, accordingly, am somewhat skeptical as to its frequency and the correctness of the pathology advocated by Hart and Carter, as shown by

frozen sections. I may be in error as to this but believe the matter should be further investigated before it is considered settled. As to operation, this should be done at once when the condition is discovered; and, if strongly probable, exploratory incision should be made. The earlier the operation, the safer it is. Delay, for the sake of saving the child, I regard as illogical, unless it is clearly felt to be also more safe for the mother.

As to the *method of dealing with the placenta*, this is perhaps not settled. In all cases, when at all possible from the nature of its attachments, it should be removed. When this cannot be done, of course there is nothing else to do but leave it under conditions as favorable as possible. It should be emptied of its blood, made as dry as possible, the cord cut close and tied, and the abdominal cavity closed.

The peritoneum will probably digest it, which, thanks to its vast absorbent power, will likely, in most cases, with clean operation, remove what would otherwise negate the operation.

In all of these operations so far referred to, it must be remembered that there are no hard and fast lines of treatment invariably to be followed, step by step, in every case. A knowledge of the expedients and resources of all complications will bring in variations that are valuable and indispensable for the successful accomplishment of their surgery.

In all cases of prolonged operation, especially in threatened shock and after hæmorrhage, and in the presence of pus or debris, the value of *flushing out the abdomen with moderately hot water* is beyond question. In puerperal peritonitis, such procedure comes in as a valuable adjunct in removing the pus and relieving shock. This latter operation is still in its infancy, so far as its appreciation is concerned. Abroad it has not met with success, according to Mr. Bantock; but along with drainage, and an early appreciation of its presence, there is much to be hoped in this line. The point especially to be urged is that, in cases already in collapse, only sufficient be attempted temporarily to save life.

\* After operation, it may be required to put the patients in a sound condition, but this should not be undertaken until there is reasonable assurance that they can endure it. The ideal surgery is the surgery that saves life, and not that which records a technically complete operation, followed by a death certificate.

In these operations, characterized by overwhelming quantities of pus, it is noticeable that there is no need whatever of the use of antiseptics. Pure water, fresh from the tap, or if possible distilled, thoroughly cleanses the abdomen, the temperature falls, the pulse slows down, and the Listerian system of germicides is, once for all, proven absolutely needless, so far as abdominal surgery is concerned.

In all abdominal surgery, it must ultimately be accepted that *germicides are useless*, and may

be harmful. The same may be said of opium, except in cases in which the opium habit has already been acquired.

As to the *time for entering upon the operations* for the various conditions referred to, it is now an axiom of surgery not to delay longer than to establish the fact that operation will be necessary at some time. This once granted, the earlier such operation is done the fewer will be the complications, and all the dangers attending operations will be diminished or avoided. There will be a shorter anæsthesia, shorter operation, less handling of the parts, less shock—surgical and dynamic—and quicker convalescence. There will be less need of drainage, because of the fewer complications. In complicated cases with adhesions, and where fringes of cicatricial tissue are necessarily left, the value of drainage is to be insisted upon. Cases do the better for it, have a more uninterrupted convalescence, and are more comfortable generally than where it is omitted. The *drainage tube* should be kept clear and clean, emptied frequently, and removed when the discharge is serum.

From my own experience, I must regard with disfavor what certain operators express concerning the tube as the result of ignorance of its proper handling, or of those cases that require it. To its use I certainly ascribe the recovery of many cases that would otherwise have been failures.

As to the *details of all operations*, they should be as exact and simple as possible. All sponges and instruments should be counted before and after operation. No hand except those of the operator, assistant and nurse should approach the trays or touch an instrument under any circumstances whatever. The incision should be closed accurately and firmly without being strangulated by the ligatures. Care should be taken that the skin edges do not invert, and thus prevent union. Before opening the peritoneum, all hæmorrhage should be checked by pressure forceps, and when once the peritoneal cavity is reached, the work should be as quickly and expeditiously done as is consistent with thoroughness. No operation should be undertaken without full preparation for any possible complication. In ligaturing the pedicle in ovariotomy, the double surgeon's knot is by all odds to be preferred to any other. It gives greater certainty of constant pressure, and carries with it less danger of slipping, as I can readily demonstrate.

The *after treatment* of these cases is marked by no special features, except to insist on absolute abstinence from food or drink until the stomach is entirely settled. The liquid diet is begun in small quantities, butter-milk being an excellent *initiative*. If there are signs of tympany, a saline purgative will usually afford prompt relief; or, if this is not well borne small doses of calomel will have the same effect in relieving the distension.

As a preparatory treatment for the operation, I insist upon rest in bed for at least twenty-four hours, and free purgation. When this is done, there is much less danger of tympany subsequent to operations. The patient should remain in bed for at least three weeks, and should wear a bandage for at least a year. This will obviate in most cases, the complication of hernia.

A word as to the *electrical treatment of pelvic disease in women*. To those who have followed out the claims of the electricians, it will be evident that many of their cures depend entirely upon the correctness of their diagnosis. When we consider the absolute impossibility of making an exact diagnosis in the pelvis or abdomen, we are justified, in the light of exact surgical experience and of our own failure, to doubt the perfection attained by these men, the most of whom have never seen inside of an abdomen. If we doubt their diagnosis, what, then, must we say of their cures?

A wide field of discussion is still left open in reference to the surgical affections of the spleen, liver and kidneys, and also of the gall bladder.

Generally, the same teaching and arguments apply to these as to the operations already considered. Where they are divergent, it is due to the anatomical relations of the parts, the same general principles underlying all.

## LECTURES ON VENEREAL DISEASES.

*On the use of injections in gonorrhoea.*—Before speaking of the proper and legitimate use of injections in the treatment of this complaint, I wish just to refer to the so-called abortive treatment by means of strong solutions of nitrate of silver, or some similar substance, by which it is claimed that a severe but simple form is substituted for the specific inflammation and thus the duration of the disease is materially shortened. I mention this plan of treatment only to condemn it in the most emphatic terms as being both uncertain and dangerous. While, perhaps it can not be said that this plan of treatment *never* succeeds in its aim in cutting short the attack; still it may most safely be asserted that it does so only in a small minority of the cases, that we never can tell whether it is going to succeed or not, and that there is always danger of producing the most disastrous results.

I know of one patient who contracted a gonorrhoea about eight years ago; he went to a physician who promised to cut it short in a few days, and administered an injection in his office. The pain was so intolerable that the patient fell down on the floor as if shot through the heart and remained in a condition of syncope for a short time. The resulting inflammation was most intense and the discharge very profuse, amounting to many ounces in the twenty-four hours. But it was not of short duration as he

had been led to expect, but continued day after day, and finally resulted in a severe cystitis from which the patient has never entirely recovered to this day. And I know another patient who, from a similar treatment, nearly as long ago, contracted the most severe and inveterate strictures for which he has undergone several operations without complete relief. With such results before our eyes and the uncertainty as to when they may be repeated, it seems to me that we are not justified in subjecting a patient to such a risk, especially while milder means are almost sure of success and are free from such fearful risks.

Injections properly used, however, have always and deservedly held a high character in the treatment of gonorrhoea. The proper period for their application seems to be toward the close of the stationary period or when the discharge is beginning sensibly to diminish in quantity. When used at this time and of proper strength there seems to be no real danger of their producing stricture or other bad consequences as claimed by some. Indeed stricture is much more likely to be caused by allowing the inflammation to go on unchecked, as it results from the deposit of inflammatory material in the sub-mucous connective tissue which is more in proportion to the duration than the severity of the case.

The syringe used should be made of hard rubber, as glass syringes in addition to their destructibility are most always unevenly blown, which gives rise to an irregular and uncertain discharge of the contents together with leakage of a part from the side of the piston rod; and metallic syringes are incompatible with many of the substances used, which act chemically upon the pewter or other metal and are acted upon by it as well.

With regard to the many forms found in the shops offered for sale for this purpose, almost any of those with a blunt or short nozzle will answer the purpose, the best of all in my opinion being that known as the hard rubber syringe, No. 1, A. Syringes with a long and pointed nozzle are to be avoided. It is also essential that the syringe should work easily with one hand. The patient should make water just before using his injection, as this act clears the urethral canal to a reasonable extent of the pus that may be present and permits the injection to come directly in contact with the inflamed mucous membrane. Having slightly warmed his injection material, which should never be used cold, and filled his syringe, taking care that all air is expelled, the nozzle of the syringe is introduced well within the meatus, but not crowded as far as it will go, and the lips of the meatus compressed laterally by pressing them together, rather than by pressing them against the syringe. The injection is then slowly and gently introduced, the syringe with-

drawn, but the meatus still compressed, retaining the injection for about thirty seconds when it is allowed to flow out. This which constitutes the whole of the act in most cases may be repeated two or three times a day, bearing in mind that a weak injection used twice a day will do more good than a strong one used once. At a later period in the case when the inflammation has reached the deeper parts of the canal, after introducing it the injection may be made to distend the whole urethra by passing the finger along the urethra from before backwards. This pressure however, should not extend beyond the peno scrotal angle, less the injection be forced into the prostatic sinus or even into the bladder itself.

With regard to the substances used as injections in gonorrhoea, their name is indeed legion and it would be a useless labor to enumerate even half of them, as no doubt all that can be accomplished by this method of medication may be done by a judicious selection from a few out of the multitude of articles that have been from time to time recommended.

No doubt more harm than good is often done by using injections of too great strength in the vain hope of thus expediting the cure. It is a good rule never to employ any injections strong enough to produce severe pain and even a moderate degree of smarting if it lasts more than about five minutes may be taken as an indication that the solution is too strong.

Too frequent changing of the remedy used is also to be deprecated—time enough should be given for the remedy to have ample opportunity to produce its effect.

On the other hand a change is sometimes desirable when a given injection has been continued several days without any perceptible result; for it is to be borne in mind that no remedy used in medicine will produce exactly the same effect in every individual, so that our best and most generally successful prescription may fail when we least expect it.

Sometimes indeed, it is well to omit all treatment of this kind for a time and then upon beginning again the remedies will have a better effect.

Perhaps of all substances used as injections in gonorrhoea, the salts of zinc are most extensively employed and on the whole give the best satisfaction. The sulphate seems to be the general favorite, but I much prefer the acetate, and the following is my favorite formula:

R.—Zinci acetatis	grs iv-viii
Tinct. catechu	℥ i-ij
Aqua rose	℥ iv

M. S. To be used two or three times a day. Sulphate or sulpho-carbolate of zinc in similar

proportions with or without the tincture catechu is also an excellent injection.

R.—Quiniæ sulph.	grs ji
Acid sulph. dilut.	M vj
Aqua	℥ i

Is highly recommended by many but, I have had no personal experience with it.

R.—Pulv. aluminis	grs v-x
Aqua	℥ i

Is a good astringent injection, but I prefer a solution of tannin of about the same strength. Tannin it should be remembered is apt to stain the linen and the patient should be forewarned of this fact.

R.—Zinci permanganitis	gr ¼-ii
Aqua	℥ i

Is a good injection in chronic cases.

The salts of iron are excellent astringent injections and would no doubt be more frequently used but for their staining the patient's clothing. Bumstead speaks highly of the liquor *ferri persulph* half a drachm to six ounces of water in the later or gleet stages of gonorrhoea.

Insoluble substances such as oxide of zinc, calamine, subnitrate of bismuth, etc., suspended in water with a little mucilage are recommended by many writers, but I have never tried them nor do I feel inclined to do so.

I have recently received a written communication from Dr. F. P. Wilson, a well known and successful practitioner, of East Toledo, highly extolling Marchand's peroxide of hydrogen, and from its reputed action upon suppurating surfaces generally, I should think much might be expected of it. I shall certainly give it a trial. It may be used full strength or diluted, according to circumstances.

Ricord, the celebrated French surgeon, was very partial to his red wine injection, which was simply claret diluted with one or two parts of rose water, gradually increasing the strength, being careful of course to use the same brand of wine all the time, until in some cases the pure wine alone was used.

A very good injection that perhaps might be used to advantage oftener than it is, is tea, using simply the infusion of green or black tea as it is prepared for the table. It is a very efficacious and agreeable remedy, according to those who have used it; it may be said that it is nothing but a simple tannin injection, but it certainly seems to possess some properties that a solution of tannin alone does not, and in some cases seems to be more efficacious.

Medicated bougies made of cocoa butter or gelatine are in no respect superior to injections, if indeed, they are not much inferior, and are dirty, inconvenient and not altogether free from danger. They have nothing whatever to recommend them unless it is novelty, but that is enough for some people.

In cases of chronic gonorrhœa where the discharge is limited to the deeper portions of the urethra, it has been recommended to make localized injections by means of a catheter syringe, the injection to be administered by the surgeon himself and confined as nearly as may be to the portion of the urethra supposed to be diseased.

The same results have been sought to be obtained by means of medicated ointments administered by capped or fluted sounds, often of very ingenious mechanism, but doubtful efficacy. It may fairly be doubted whether either of these methods possess any real superiority over injections administered in the ordinary way. Many of these cases of chronic discharge are kept up by the existence of stricture or prostatic irritations. In the former case treatment of the stricture is essential to a cure, and in the latter, constitutional treatment, and oftentimes cessation of all treatment with a protracted vacation and complete change of scene and surroundings is the best plan.

Some further remarks on these chronic urethral discharges will be presented when we come to treat of gleet.

#### TREATMENT OF SPECIAL SYMPTOMS.

*Chordee*.—Owing to the hyperæmic condition of the organ and nervous erethism or sensibility, which is present more or less in all cases of gonorrhœa, there is an increased tendency to erections, especially when the patient is warm in bed. These are at all times painful, but especially when there is exudation of inflammatory lymph in the corpus spongiosum, which prevents its expanding with the corpora cavernosa, but instead of which it remains as a rigid, sensitive chord below and between these bodies, so that when they expand in erection it is severely dragged upon, causing the penis to curve downwards and giving rise to intense, often excruciating pain. This symptom which is known as *chordee*, is sometimes quite a prominent one, causing by far the greater part of the patient's suffering and demanding special treatment.

In some cases coming on just as the patient is sinking off to sleep, and being repeated as often as sleep comes on, it deprives him almost entirely of his necessary rest and is quite a serious affair.

When severe, *chordee* is often a very difficult symptom to combat. The patient should persist in his lowering regimen, a brisk saline cathartic may be repeated from time to time, bathing the penis in water as hot as can be borne several times during the day is also useful; the best method of accomplishing this is to immerse the organ in a cupful of hot water, moving it briskly about in the fluid, to which a little watery

extract of opium or fluid extract of belladonna may be added with advantage.

The patient should most sedulously avoid all sources of sexual excitement, not go to bed until thoroughly sleepy, sleep in a well ventilated room and be but lightly covered with bed-clothes. He should avoid lying on the back and empty his bladder just before retiring.

Sometimes a warm bath or hip bath at bedtime is useful.

Among the drugs administered for this symptom, lupuline has a high reputation but it has to be administered in large doses.

R.—Lupulini ʒ jss  
Fiat pilulæ, No. xx.

Of these from four to six may be taken at bedtime the first night; if this does not answer, eight or ten the following night and even fifteen at a dose have been recommended.

Many patients can not or will not take so many pills; the fluid extract or tincture may be given, but in large doses are apt to upset the stomach. Bromide of potassium in a full dose not less than half a drachm at bedtime, well diluted, is often successful. Sometimes it does better combined with twenty grains of chloral. The trouble with the bromide in such large doses repeated night after night is that it is apt to set up gastric irritation. Should these remedies fail, a full dose of opium may be given, which acts better in combination with camphor.

*Vesical Irritation*.—In some cases there is very great ardor urine with frequent micturition and vesical tenesmus, in short all the symptoms of severe irritation of the bladder, although real cystitis is rare. In these cases the prescription of benzoic acid and biborate of soda already mentioned is often very useful.

The copious use of demulcent drinks such as flax seed tea is also to be recommended; it should not be made too thick and slimy; should be sweetened and flavored with lemon—in short be made agreeable so that the patient can take large quantities without offending the stomach. A thin, soft, hot poultice laid over the hypogastrium at bedtime, as also a hip bath before retiring are of use.

When the patient is very frequently disturbed during the night, suppositories of cocaine, or opium and belladonna are indicated.

Belladonna is itself a sovereign remedy in vesical irritation, but the trouble is that in doses large enough to be efficacious, it is apt to blur the sight and give rise to other symptoms which alarm the patient.

*Lymphangitis*.—A not very frequent symptom is inflammation of the fine lymphatics of the penis. The organ becomes unusually swollen, red, tender and painful; and there is often a quite considerable febrile reaction. The patient should be confined to bed and the very best

local application is the cold rubber coil. The penis is completely covered with thin rubber tubing coiled around it, through which cool (not cold) water is kept constantly running night and day. In this most admirable of all methods of applying cold locally, we have two means at our disposal of regulating the effect produced; viz., by varying the temperature of the water used, and the rapidity of the stream. If this can not be procured, the next best means in my judgment is enveloping the penis in soft rags wet with the old fashioned lead and opium wash. This is said to be an incompatible and unscientific prescription; that may all be, but it is a very comfortable and useful application, nevertheless.

In these cases there will sometimes be slight enlargement and tenderness of the inguinal lymphatics, which are best let entirely alone, as they never suppurate unless provoked to do so by irritating applications.

*Retention of Urine.*—In every case where the inflammation is at all severe the caliber of the urethra is necessarily diminished somewhat by the swelling of the mucous membrane. This sometimes, either from exposure to the cold, some imprudence or without assignable cause, increases to such an extent as to produce complete retention of urine. No doubt there is also a marked spasmodic element as well in these cases.

An effort should be made by a prolonged hot bath and a full dose of opium to get along without the use of the catheter, and it will very often succeed. But if it does not the catheter should be used with the utmost care and gentleness. A Nelaton's soft catheter is the best instrument to use and once will generally be all that will be needed.

*Gonorrhoeal Cachexia.*—In a few cases of severe and protracted gonorrhoea that I have seen the patients have become very much emaciated and anæmic, and so extremely low spirited and melancholy as to be reduced to the very verge of suicide.

This condition seems to me to fairly deserve the title of gonorrhoeal cachexia and is very often obstinate and rebellious to treatment. No doubt it may be brought about or intensified by injudicious persistence in a lowering plan of treatment and by profound gastric disturbance, the result of the various medicines used in the treatment of the complaint.

Such patients should be put upon a full and generous diet, and in some cases a little good wine may be allowed. This, with complete freedom from business and cares of every kind, a sea voyage or a prolonged sojourn by the sea shore, or at some mountain resort, is worth more than any drugs. All special treatment should be suspended at least and it will often be found not necessary to resume it.—*J. H. Pooley, M. D., in Toledo Medical Compend.*

## ABSTRACT OF THE REPORT OF THE COMMITTEE ON GYNECOLOGY.

By O. O. BURGESS, M. D., Chairman, San Francisco.

*The Treatment of Fibroid Tumors of the Uterus.*—The speaker, alluding to the brilliant progress in gynecology of the past year, said that this had been mainly in the direction of surgical methods and procedures, while with one notable exception the non-surgical methods of treatment had fallen behind. The vast increase in our knowledge of pathology of the pelvic organs, together with a corresponding increase of diagnostic skill, have rendered possible surgical achievements unparalleled in brilliancy and in the results conferred upon suffering womankind. But have they correspondingly improved our methods of treatment of the earlier stages of pelvic diseases by which they may be arrested and cured before surgical interference becomes a necessity? A pus cavity in a tube or ovary, freshly removed from the living subject furnishes ample justification for its removal and is a tribute to the pathological knowledge and diagnostic skill of the operator. But does it suggest any new method of treatment for the processes that led up to that condition? With the exception of some valuable improvements in the use of electricity there has been but little advance in the non-surgical methods of treatment of diseases of the pelvic organs.

The remarkable perfection and success of surgical methods attracts attention and discussion, and has a tendency to lead to an over-zealous resort to them, while more conservative measures are not followed by the same enthusiasm. We are apt to forget that operations are always fraught with dread and terrible anxiety to the patient and her friends, whilst many of them are mutilating and by no means free from danger to life. Success sometimes leads to an extension of the limits of surgical interference which is not justifiable. If operative zeal were confined to the repair of torn services with a view to the cure of any and every ill that may befall a woman there would be less to say; but when it comes to the removal of any or all of the pelvic generative organs upon insufficient indications, or before other promising methods of treatment have been fairly tried, it is time to raise a protest and to enter a plea for a more careful study and pursuit of conservative measures. There should be a few exceptions to the rule that no mutilating or dangerous operation is justifiable so long as the possibility of success by other methods remains undemonstrated. Many of us will admit that we have sometimes been carried along too hastily and too far, and have done operations that were afterwards regretted. He knew himself that he had done things that he would not do again under the same circumstances.

These introductory remarks have a direct

bearing upon the chief subject of this paper, the treatment of uterine fibromata. There are but three methods that need claim our attention at this time: (1) The electrical method of Apostoli. (2) The operative method by removal of the uterine appendages. (3) The radical surgical method by complete removal. Apostoli's method by galvano-chemical cauterization naturally claims consideration first because of its important bearing upon questions of operative interference. He defines it "as a galvano-chemical cauterization of the uterus, vaginal, intra-uterine or parenchymatous and always monopolar." It differs from the older methods mainly in that the dosage is made precise by the introduction of galvanometers of intensity which furnish the exact measure of the current passed through the uterine tissue. In the use of high intensities (50 to 250 ma.) by means of the abdominal electrode of moistened clay, the former being the highest used until Apostoli's improvements were introduced. In better localization by direct application of the active pole through the vagina to the uterine cavity, or into the fibroid growth when the uterine cavity cannot be entered. In a more scientifically exact knowledge and appreciation of the topical effects of the two poles, the positive pole is hemostatic directly by coagulation or indirectly by the formation of contractile cicatrices, and is therefore indicated in hemorrhagic fibromata. The negative pole is fluidizing, producing temporary congestion without direct hemostatic effect. It is more stimulating to the circulation of the uterus and hastens the regression of the tumor, relieving amenorrhea and dysmenorrhea much more rapidly than the positive. Apostoli's differs essentially from all other methods of electrical treatment, and its results are not to be measured by those obtained by other means. When failure is reported, it is frequently the fault of the operator rather than the method. Thus the most striking results the speaker had yet obtained were in a case of interstitial fibroid that had been treated for a long time by electricity without benefit. Close questioning revealed the fact that an electrode had never been used in the uterus or even in the vagina.

The effects of Apostoli's treatment may be divided into two classes, the anatomical and the symptomatic. Among the former are: (1) Arrest of growth. (2) Regression. (3) Mobilization of fixed tumors through absorption of adhesion. (4) Pedunculization by extrusion of intramural growth outward toward the peritoneal surface or inward toward the uterine cavity. (5) Radical cure (rarely) by complete disappearance of the tumor by absorption or by its extension into the uterine cavity and its delivery therefrom. The symptomatic effects are: (1) Arrest of hemorrhage. (2) Suppression of pain and dysmenorrhea. (3) Suppression of reflex troubles. (4) Prompt and marked improvement

in the general health is invariable, and as a rule is speedily felt. It is due primarily to the tonic effect of the current, and secondarily to relief from pain, hemorrhage and distressing reflex symptoms. Arrest of growth is usually prompt and almost constant. Reduction in size of tumor, although sometimes rapid, is usually slow, and is variable in the extent of retrogression secured. With arrest of hemorrhage, relief from pain and all reflex disturbances and restoration to health and activity and the patient may be called symptomatically cured. It is true that even this is not always secured, but it is rare to see a suitable case that is not more or less benefited by it. Finally, if surgical interference becomes necessary, the patient is in better condition for operation locally and generally. Failure is due sometimes to a faulty application of it, and occasionally to intolerance of sufficient dosage. Experience proves that great intolerance is often due to conditions, such as active pelvic inflammations, closed pus cavities, etc., it thus becomes a valuable diagnostic agent.

These statements as to the value of Apostoli's method are based not only upon his own very valuable and extensive reports of cases, but upon those of many other eminent gynecologists in all parts of the world. The number of cases treated has now become very large and more than sufficient to prove or disprove the efficacy of the method. Twenty different observers, in various parts of the world, reporting 2112 cases, although not equally successful, have satisfied themselves of the efficacy of the treatment. Drs. Thomas and Skene Keith have not done a single hysterectomy or castration for more than two years, and are enthusiastic enough to say that they never expect to do another. Of the speaker's own cases, ten in number, it was rather premature to speak. They were all of recent date and still under treatment. The results, however, already obtained, have been highly satisfactory. Hemorrhage has been arrested in all, pain lessened and suppressed, and the general health invariably improved. Notwithstanding the array of evidence in favor of Apostoli's method, the fact remains that it is rejected by many, indeed, perhaps by a majority of those interested in the treatment of fibroid tumors of the uterus. The reasons for this are various. With some it arises from prejudice, apathy, or a lack of personal knowledge of the results of treatment; others have tried it and have not been satisfied, but the most serious opposition comes from surgeons filled with operative zeal and the pride of success.

The chief arguments advanced are that the treatment is slow, painful, tedious to both physician and patient, and not at all sure of even partial success. That at best the cure is only symptomatic, and even then not permanent, the



tumor still remaining as a standing menace. By some it is denounced as dangerous. Most of these objections have already been answered. As to the dangers, it is sufficient to state that out of the large number of cases cited there has been just four deaths, or .0018 per cent. Even these were due more to the faults in the operators than in the method, and are not likely to occur again. The conclusions to be drawn are that Apostoli's method is not only worthy of trial, but that it should always be tried before resorting to surgical methods, which though more speedy and radical, are always mutilating and dangerous to life.

As to the second method of treatment, by castration, there is not much to be said at this time, probably there are few cases capable of relief by this method that could not be better relieved by electricity; indeed, galvano-cauterization has cured several cases after castration had failed. Still this operation will always hold a place where myomotomy is considered unnecessary or too difficult and dangerous.

Finally as to the third and last method, that of removal. Since removal of the tumor does not necessarily involve hysterectomy, the term myomotomy, which has been used to indicate the removal of the tumor with or without the whole or a part of the uterus, seems a very judicious one to employ as a designation of this method. During the past few years improvements in the *technique* have resulted in a steady decline in the mortality, until some operators declare that in their hands myomotomy is no more fatal than ovariectomy. The result of this has naturally been to expand the limits of its indications. It is not strictly true that the mortality of this operation has been brought so low except in a few short and exceptional series of cases. In 56 cases recently reported by Leopold, there were 12 deaths (21.4 per cent.), while according to Vautrin the general mortality of hysterectomy in 39 per cent.

It is a fact that a large percentage of uterine fibroids require no treatment whatever. If the tumor causes no symptoms it does not need any treatment, and many of us have seen cases go on for years without serious inconvenience. There is another and a large class of cases in which treatment is absolutely demanded, and here electricity stands between the patient and the knife. Thus Leopold, who does not believe in electricity, found it necessary to operate on 140 out of 400 cases, while the Keiths and Sir Spencer Wells have found electricity to do away with the necessity of operation. I believe that Apostoli's method is sure to make its way, and that the time will come when the following rule of practice will be observed: "Myomotomy shall be considered unjustifiable except in cases in which electricity has failed, or to which it is inapplicable."

## TREATMENT OF ECZEMA IN CHILDREN.

In the *Revue Mensuelle des Malades de l'Enfance* for August, 1890, Sallfeld gives the following treatment for eczema: Some interesting considerations are presented concerning the treatment of eczema in children, which differ essentially from those which are usually adopted in adults. Of all varieties of local eczema which are developed under the influence of external causes, the most important in children, in the author's opinion, is intertrigo. It is particularly common in fat children, and is frequently located near the margin of the anus, in the inguinal folds, in the folds of the neck, and in the vicinity of the chin. Intertrigo thus localized is readily cured by the use of bland and inert powders, but if the disease includes large portions of the surface of the body, the local treatment should be supplemented by change in the diet, and if diarrhoea exists, it should be energetically treated as well. If the skin is the seat of an intense inflammation, cold compresses should be used for several days which have been moistened with a mixture composed of equal parts of a five-per-cent. solution of boric acid and the officinal solution of subacetate of lead, an ointment of boric acid being used after the former preparation has been discontinued. If the skin is very moist it should be dried with a suitable absorbent powder before using the ointment. In the treatment of eczema of the face and scalp which is so common in fat children it is well to diminish the quantity of nourishment, to eliminate fatty materials from the diet, and to combat habitual constipation with appropriate enemata. The crusts upon the head and face should first be softened with olive oil, and after they have been removed the surface should be anointed with following ointment:

R.—Boric acid,	45 grains	
Zinc oxide,	75 "	
Vaseline,	} of each	450 " —M.
Starch,		

If there is generalized eczema of a scrofulous character, the organs of digestion must be carefully interrogated, and if the alimentation is insufficient, it must be supplemented with cod-liver oil combined with phosphorus or arsenic. The local treatment should be limited to the use of vaseline inunctions, followed by the use of bland powders upon the skin. Applications of tar preparations should be avoided, as they only irritate the skin.

The following formula may be used with advantage:

R.—Ammoniated mercury,	30 grains	
Peruvian balsam,	75 "	
"Wilson's ointment",	450 "	—M

—*Archives of Pediatrics.*



## THE VARIETIES OF HYDROCELE.

Duplay mentions a large variety of hydroceles which may be encountered in the inguino-scrotal region, together with the means of differentiating them. It is an easy matter to distinguish the so-called "hydrocele by infiltration" from hydrocele with effusion, since the former is simply an œdema, and is not accompanied with fluctuation and transparency, while the tissues retain the imprint of the fingers. More difficult is the diagnosis between encysted hydrocele of the testicle and epididymis and vaginal hydrocele. The differences here consist in the variable connections which exist between the sac and the testicle. The effusion in hydrocele of the tunica vaginalis entirely surrounds the testicle, and the latter occupies a postero-inferior position, and is a little internal to the tumor. This is the rule, but it is well to remember that in cases of inversion of the epididymis the testicle is found in front of the effusion. In encysted hydrocele there is a cyst which takes its origin between the testicle and the epididymis, either on a level with the head of the latter, or a little lower. This cyst increases in volume, little by little, until it conceals the testicle, but it always remains attached to the head of the epididymis by a point more or less constricted, as large as the thumb or two thumbs, and it is always possible to outline the gland, which is impossible when it is enveloped by an effusion.

It is necessary to distinguish several varieties of vaginal hydrocele, and to describe separately congenital hydrocele, and hydrocele in Dupuytren's pouch. In the fetus there is nothing in the tunica vaginalis, and it is at the time of the descent of the testicle that a prolongation of the peritoneum is dragged down, constituting the serous cavity. Congenital hydrocele is that in which the peritoneo-vaginal prolongation is not separated from the large abdominal cavity. The liquid which the sac holds is then very easily reducible, and returns into the abdomen very rapidly when the passage is large. If, on the contrary, the passage is small, it may require some time to return all of the fluid. Hydrocele in Dupuytren's pouch is a second variety of congenital hydrocele. It is easy to confound this variety with bilobar hydrocele. The latter is that in which, owing to the resistance of the fibrous tunic of the pouch, a bridle is formed which divides the sac into two portions. Hydrocele in the pouch is a variety in which the peritoneo-vaginal conduit, instead of becoming obliterated after the passage of the cord, is closed only in its upper portion, this closure completely shutting off communication with the peritoneal cavity. If, under these circumstances, an effusion occurs into the tunica vaginalis, it will divide into two portions, the one occupying the cavity which extends from the base of the sac to the orifice of the canal, and the other an intra-

canalicular dilatation. Occasionally the peritoneum is pushed back, and it then forms a subperitoneal sac, which may be felt in the iliac fossa. In some cases, vaginal hydrocele runs even to the external orifice of the vaginal canal.

Of hydrocele of the cord there are two varieties: in one, the cavity presents itself above the line of the cord, and evidently consists of the non-obliterated remains of the peritoneo-vaginal canal. It is seen as a small, resistant, transparent tumor, at a point more or less elevated above the passage-way of the cord. Some cysts of this kind at times descend to the lower portion of the pouch, and it is then possible to confuse them with ordinary hydrocele. On the other hand, the obliteration of the peritoneo-vaginal canal may take place in its lower portion, all the upper portion remaining patulous, and forming a serous cavity which may be taken for an hernia or an effusion. In this variety, which is very rare, the effusion descends along the inguinal canal, and forms a transparent, reducible tumor. This is, if we adopt the name given by Chassaignac, a peritoneo-funicular hydrocele.

Finally, there is hydrocele of the hernial sac, which may extend the length of the inguinal canal, and even reach to the base of the pouch. The hydrocele is a serous cavity filled with liquid; sometimes the intestine and omentum are absent, and there is no communication with the peritoneum, but at other times an organ is found in the sac which should be in the abdominal cavity. Hydrocele of the hernial sac does not descend to the base of the scrotum, and it is easy to recognize it. Nevertheless, the diagnosis between it and peritoneo-funicular hydrocele, or cysts of the cord, may be quite difficult.—*L'Union Médicale*,—*Med. News*.

## LINIMENTS FOR PRURITUS.

*La Semaine Médical* gives the following liniments for pruritus :

R.—Pure resorcin,	1 drachm
Glycerin,	2 drachms
Water,	4 ounces

Mix and label "To be Used Externally;" or,

R.—Menthol,	3 drachms
Glycerin,	2 drachms
Water,	4 ounces.—M.

This is to be labelled "Use Externally." and is to be shaken before using.

Finally, the following mixture may prove of value :

R.—Ichthyol,	1 to 3 drachms
Glycerin,	2 drachms
Alcohol, }	of each 2 ounces.—M.
Water, }	

Use externally.

*Med. News*.

## TREATMENT OF SEAT-WORMS.

Success in the treatment of cases of seat-worms depends upon the prolonged and constant use of a vermifuge or some active vermicide. The worms are generally attacked by means of injections, suppositories, or ointments. Of the injections, a favorite prescription is a solution of common salt in the proportion of 1 to 5. Sometimes sugar and water may be used, and an infusion of absinthium is employed by some French practitioners. Still others employ simply cold water. It is said that West and Barthéz recommended astringent injections composed of the perchloride of iron and lime-water, as follows:

R.—Lime-water, 6 ounces  
Perchloride of iron, 10 drops.—M  
And also,  
R.—Lime-water, 4 ounces  
Decoction of marshmallow, 1 ounce.—M

For the same purpose Trousseau prescribed suppositories of tannin made up as follows:

R.—Tannic acid 15 grains  
Cocoa butter 1 drachm.—M

Other physicians have employed injections of asafetida, and many have found the following treatment useful:

R.—Alcoholic extract of senna leaves, 30 grs  
Boiling water, 4 ounces

Make an infusion and sweeten with syrup of wild cherry, 4 drachms. This may be given to an infant of four or five years as a laxative, and if it does not act may be followed by from a half to one drachm of the sulphate of magnesium. After this an injection may be given composed of 1 ounce of powdered quassia chips to pint of water, or of carbolic acid in the proportion of from  $\frac{1}{2}$  to 1 drop to 4 ounces of water. An emulsion of calomel may be employed composed of calomel 3 grains and mucilage of flaxseed 4 ounces.

Guersant is said to employ sulphuretted potash  $2\frac{1}{2}$  drachms, water 4 ounces; while Rossbach finds naphthaline of great service, and administers it as an injection as follows:

R.—Naphthaline, 15 grains  
Olive oil,  $1\frac{1}{2}$  ounces

This quantity may be doubled or tripled in adults. Sometimes he prefers to use naphthaline from 2 to 10 grains and decoction of marshmallow 6 ounces. If the worms inhabit the lowest portion of the intestine it may be well to follow the treatment of Cruveilhier, viz,—to employ mercurial ointment or to rub into the anus an ointment composed of calomel 8 grains and cocoa butter 1 drachm.

Trousseau is said to employ the following suppositories:

R.—Calomel 1 drachm.  
Vaseline 3 drachm.

When the worms inhabit the higher portions

of the rectum they will probably resist all therapeutic measures unless they be attacked through the stomach. Under these circumstances it may be well to employ calomel and santalin. of each  $\frac{1}{2}$  grain, which is to be administered early in the morning in order that the calomel may act by evening. This dose is the proper one for a child of two to three years. *Revue Générale de Clinique et de Thérapeutique*.—*Medical News*.

## TREATMENT OF TYPHOID FEVER.

The *Revue Général de Clinique et de Thérapeutique* gives the following method used by Teissier in the treatment of typhoid fever. Morning and night a powder composed of 5 grains of alpha-naphthol and 3 grains of salicylate of bismuth is given. In addition four cold injections are used, at intervals of twenty-four hours, with the object of increasing diuresis. After the mid-day injection he prescribes the following tonic and antipyretic mixture:

R.—Extract of cinchona, 1 drachm.  
Sulphate of quinine, 15 grains.  
Tincture of valerian, 1 ounce.—M.  
Teaspoonful at a dose.

Teissier also applies cold compresses to the head and abdomen, and the patient is allowed 10 ounces of Bordeaux wine and one and a half pints of milk or broth in the twenty-four hours. He employs alpha-naphthol in preference to beta-naphthol because the latter is very much more poisonous; thus, to produce poisoning in a man of ordinary weight it is necessary that twice as much alpha-naphthol be given as of beta-naphthol. In consequence it is possible to give larger doses of alpha-naphthol without danger, and obtain thereby a greater degree of intestinal antiseptis. The cold baths which he recommends augment, in his opinion, the elimination of toxic substances in the urine, and the naphthol stops their production in the intestine.—*Med. News*.

## CHOLAGOGUE POWDERS FOR HEPATIC COLIC.

In the *Revue Général de Clinique et de Thérapeutique* the following treatment for the relief of hepatic lithiasis is given, based upon the fact that Biet and others have found that the benzoate and salicylate of sodium act as cholagogues. The nux vomica in the prescription aids in regulating the bowels and in relieving anorexia and dyspepsia.

R.—Benzoate of sodium, } of each 75 grs.  
Salicylate of sodium, }  
Powdered nux vomica 7 " —M.

This is to be divided into 20 powders, of which the patient should take 1 three times a day for two months.

## CHLOROFORM.

I will conclude by giving a series of "practical conclusions," derived from studies of the subject by experiment upon animals, which do agree with observations upon the human subject. And I consider it a matter of no slight congratulation that they were presented at the late International Congress by one of our countrymen, Professor H. C. Wood, in his address on Anesthesia. They have been lately published in nearly all the journals, but they will bear repeating. The closest examination fails to detect any flaw in them, or to find any point which is not supported and which cannot be substantiated by clinical records:

1. The use of any anesthetic is attended with an appreciable risk, and no care will prevent an occasional loss of life.

2. Chloroform acts much more promptly and much more powerfully than ether, both upon the respiratory centres and upon the heart.

3. The action of chloroform is much more persistent and permanent than that of ether.

4. Chloroform is capable of causing death either by primarily arresting the respiration, or by primarily stopping the heart, but commonly (sometimes) both respiratory and cardiac functions are abolished at or about the same time.

5. Ether usually acts very much more powerfully upon the respiration than upon the circulation, but occasionally, and especially when the heart is feeble, ether is capable of acting as a cardiac paralyzant, and may produce death at a time when the respirations are fully maintained.

6. Chloroform kills, as near as can be made out, proportionately four or five times as frequently as does ether.—*J. C. Reeve, M. D., in Med. News.—Columbus Med. Jour.*

## SWEATING FEET.

The following may be tried when alum, belladonna, etc., have failed (*Brit. Med. Jour.*):

1. Wear low shoes, wool socks, and dust the feet over twice a day with iodol; they will soon be as hard, sweet and comfortable as one could wish. 2. Wash the feet at night with very hot water, put on white cotton socks, and immerse the feet, thus covered, in methylated spirit poured into a basin; wear the socks all night; they will soon dry in bed. During the evening wear cotton socks and common felt slippers, and keep the socks constantly saturated with spirit. In a week the cure will be complete. The best ventilated boots are made of stout canvas.

R—Liq. plumb. diacet.,  
Acid. carbolic,  
Aque, } aa ʒ ij,  
ad ʒ ij.

M.—One tablespoonful to be mixed with a pint of warm(ish) water, and the feet to be washed every morning and dried with a soft towel.

3. Wash the feet night and morning with soap

and water, and after careful drying, sponge them over with the following lotion:

R—Plumbi acet., ʒj,  
Acet. destil., ʒj,  
Sp. vini. methylat., ʒij,  
Aq., ad ʒ xvj.  
Sig—Ft. lotio.

## NOVEL TREATMENT OF INGROWING TOENAIL.

Dr. Puerckhauser recommends a novel, simple and at the same time competent treatment for ingrown toenail.

A forty per cent. solution of potassa is applied warm to the portion of the nail to be removed. After a few seconds the uppermost layer of the nail will be so soft that it can be scraped off with a piece of sharp edged glass. The next layer is then moistened with the same solution and scraped off. This must be repeated until the remaining portion is as a thin sheet of paper, when it is seized with a pincette and lifted from the underlying soft parts and severed from the other half. The operation does not require more than half an hour's time, is painless and bloodless, while the patient is delivered from his suffering without being disabled even for an hour.—*Pittsburgh Med. Review.*

## AN EARLY ATAXIC SIGN.

Weiss, of Vienna, says that an early symptom of locomotor ataxia is an inability on the part of the patient to walk backward, while as yet, and in other ways, he may be able to walk with firmness and rapidity. Perron, of Bordeaux, has also, as we stated several weeks ago, recently suggested an early diagnostic sign, which is simply a modification of the Romberg test—namely, causing the suspected ataxic patient to stand upon one leg, instead of two, with the eyes closed. If the patient shows a tendency to fall, it may be inferred that the spinal trouble has begun which will lead on to locomotor ataxia, even if the Romberg test fails, as it not infrequently does in cases that are not well advanced.—*Columbus Med. Jour.*

## THE TEN COMMANDMENTS OF ABDOMINAL SURGERY.

1. The arrest of hæmorrhage. 2. The avoidance of mechanical irritation. 3. The guarding against infection. 4. The proper apposition of the edges of the wound. 5. The provision of necessary drainage. 6. To apply gentle pressure to prevent exudation. 7. To give perfect physiological rest. 8. To secure the best possible position of the parts to promote comfort and healing. 9. To provide for hygienic surroundings. 10. To attend to the patient's general health.—*Dr. Griffiths.—Southern Practit.*

## BIBLICAL MEDICAL ETHICS.

"Honor due the physician and why?"—*The book of Apocrypha, Ecclesiasticus, chapter xxxiii.*

"1. Honour a physician with the honour due unto him, for the uses which ye may have of him, for the Lord hath created him.

"3. The skill of the physician shall lift up his head, and in the sight of great men he shall be in admiration.

"4. The Lord hath created medicines out of the earth; and he that is wise will not abhor them.

"12. Then give place to the physician, for the Lord hath created him; let him not go from thee, for thou hast need of him.

"13. There is a time when in their hands there is good success.

"15. He that sinneth before his maker, let him fall into the hands of the physician."

Medical men will recognize the above clipping, but fearing the laity might not read understandingly a short explanation is given. The books of Apocrypha are considered spurious scripture (hermaphrodite) by Protestants. The book of Ecclesiasticus is supposed to have been written by Jesus the son of Sirach and is termed, "the prologue of the wisdom of Jesus." This book was written about two hundred years before Christ.

The Apocrypha is contained in many of the Protestant bibles.

These sayings, probably, give a fair estimate of the medical man, as held by the laity in those days. It is to be noted that he was called a physician and not "Doc." The reason assigned for this honor, however, "the uses ye may have of him," will not bear close scrutiny from a moral standpoint; but it represents the spirit of the people of to-day.

The last clause of the first verse forever settles the vexed question of the origin of doctors, "for the Lord hath created him." The skill of the physician then as now marked his success. He must possess ability in some direction or he cannot succeed. If he has merit, somebody will appreciate it whether it is in the line of our liking or not. The world appreciates success and extends the helping hand. "And in the sight of great men he shall be held in admiration." The fourth verse should be pondered by skeptics in medicine. It is not the part of wisdom to abhor medicines. The practitioner who fails as a rule to get results from the medicine he administers should turn a searching gaze within himself and often he will discover the reason of his failure.

The twelfth verse no doubt means to set a plate for him at table, for he is tired and hungry with his long ride or much labor and waiting, and to remember him on pay day. The second

sentence, "God has created him," drives the truth of his origin home and clinches it.

"Let him not go from thee," do not put him out of mind; do not banish him from your thoughts—keep him in hailing distance—an unexpected event may occur at any time. The period of gestation is up and you had better speak to him in time. Do not let him go off on the train to Jerusalem or Damascus, but engage his time and pay him.

Verse thirteen says "There is a time when in their hands there is good success." There were times when they were not successful. People would die. The physician would at one time be on Pisgah's Mount and again in the Slough of Despond. A bad run of cases making him wish it was the other fellow's; his rival's luck. Wishing he had stuck to the farm or workshop. Wondering if he had not missed his calling. But this will not do; he arouses himself from his dispondency; at it again, and good success crowns his efforts. In those days the physicians blistered and bled, gave strong drastic cathartics and turpeth mineral. Canterized with the hot iron using no anæsthetic. The physician was the go-between, middle men as it were, between the Creator and the other fellow, giving color to the mooted question of the physician's origin, for verse fifteen says, "He that sinneth before his Maker let him fall into the hands of the physician."

## ITCHING OF JAUNDICE.

For the itching of jaundice, Prof. Da Costa advised sodii bromidum with antipyrin internally, with the following ointment externally:

R. Menthol, gr. xx.  
Alcohol, 1 oz.

M. Sig. For local use.—*Weekly Med. Rev.*

RHEUMATISM.—Audhuri recommends the following syrup:

R. Potass. iodid, gr. lxxx;  
Sodii Salicylat. ʒv;  
Syrup aurant. cort., ʒx;

M. Sig. ʒss. to ʒj. daily.

—*Medical News.*

## PERSONAL.

Drs. Robert Craik and George Major sailed for England on July 1st in the SS. "Lake Ontario."

Dr. W. Grant Stewart left for Liverpool on July 4th per Allan SS. "Polynesian." He purposes being absent about two months.

Dr. T. Rodger, head surgeon of the Grand Trunk Railway, who has for the past seven weeks been dangerously ill with erysipelas, is now, we are pleased to be able to say, considered out of all danger. We trust ere long to see him quite recovered.

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## EDITORS:

A. LAPHORN SMITH, B.A., M.D., M.R.C.S., Eng., F.O.S., London  
F. WAYLAND CAMPBELL, M.A., M.D., L.R.C.P., London.

## ASSISTANT EDITOR

ROLLO CAMPBELL, C.M., M.D

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MONTREAL, JULY, 1891.

## THE CONSERVATION OF ENERGY.

Although a chapter on this topic is generally to be found in text books on physiology, there are still doctors who do not understand the meaning of the term. Of such is a recent contributor to a medical journal who claimed to have made the startling discovery that workers and especially brain workers might increase their capacity for work indefinitely, simply by drinking a certain amount of strong black coffee, at the end of a hard day's work, and thus be enabled to keep on working all night with renewed vigor. We don't exactly remember what he told his readers to do next morning, but suppose he would tell them to take more coffee. We hope that no one who read his article did anything but smile, as we did, but if any are disposed to follow his advice, nothing could be more disastrous to health. To deprive oneself of all the sleep we can take is little short of madness; indeed to the latter it often leads. One cannot do without sleep very long without paying the penalty with compound interest, and the penalty is generally exacted in the form of insomnia. Insomnia is one of the marks of an over wrought or worried nervous system, while being able to sleep soundly for from six to nine hours is a fair test of a healthy nervous system. The only sure treatment for insomnia is to undo as

much as possible the wrong that has been done of robbing nature of her rights; stop mental work, spend twelve hours a day in bed and the other twelve in physical work or recreation. The man who would increase his powers of work with coffee, cocaine or any other stimulant is every bit as stupid as one who would expect to restore his tired horse by means of an extra heavy whip instead of the needed rest.

## BRITISH MEDICAL ASSOCIATION— MONTREAL BRANCH.

Dr. Ernest Hart, the able and energetic editor of the *British Medical Journal*, honored our city with a visit the other day on his way from the East. At his request a meeting of the profession was hurriedly called to discuss with him the advisability of forming here a branch of the British Medical Association. On the evening of June 19th some thirty medical men assembled in the rooms of the Medico-Chirurgical Society. Dr. Shepherd, as president of the Society, was called to the chair.

Dr. Hart gave a very interesting address, referring first to his trip round the world, and especially to his sojourn in Japan, where he spent much time in studying the history of medicine in that remarkable country. He then went on to state that it was the desire of the Council of the British Medical Association that colonial branches should be formed on the same lines as the so-called "Provincial Branches" at present so universal in Great Britain and Ireland, and which have been found such a source of strength to the mother association. The doctor stated that among the advantages accruing from membership and the annual payment of \$5.25 were included an *entrée* to the Metropolitan House in London, which afforded many of the privileges of a club, and the receipt of the *British Medical Journal*. He further proceeded to explain that local branches had a large latitude for autonomous government, organization and development according to their various

needs. They might hold their meetings once a year or once a month, as they pleased, and either in one centre or various centres they might meet either as the whole branch or in sections according to locality. Where societies were numerous and well developed they were not in any way interfered with, nor had it been found in the oldest settled communities that the prosperity of any local institution was in any way interfered with. Thus no local jealousies arose, and while the Association fulfilled its great purpose of uniting the whole profession of this great empire in bonds of friendship and brought them constantly into touch with each other it aimed at fulfilling only such local needs as were found to require supplementing. He concluded by expressing his gratification at the unanimous and cordial manner in which the proceedings had been taken.

The following resolutions were then moved and carried unanimously:—

Moved by Dr. Hingston, seconded by Dr. Geo. Ross: "That this meeting of members of the medical profession, resident in Montreal, cordially sympathizes with the work of the British Medical Association in bringing the members of the medical profession throughout the whole extent of the British Empire into direct union and frequent intercommunication for the purpose of promoting mutual friendship, advancing scientific knowledge, and furthering the general interests of the medical brotherhood; and that it will use its best efforts to promote the extension of the membership of the British Medical Association throughout the Province of Quebec."

Moved by Dr. George Armstrong, seconded by Dr. J. Chalmers Cameron: "That it is desirable that a Montreal branch of the British Medical Association be constituted, and it is hereby constituted, subject to the sanction of the Council of the British Medical Association, its laws and by-laws."

Moved by Dr. Girdwood, seconded by Dr. Wilkins: "That the following gentlemen be, and they are hereby appointed,

officers of the Montreal branch, pending sanction by the Council of the Association: President, Dr. Hingston; 1st Vice-President, Dr. Geo. Ross; Treasurer, Dr. James Perrigo; Honorary Secretary, Dr. J. C. Cameron. Other members of Council—Dr. T. G. Roddick, Dr. F. W. Campbell, and Dr. Geo. Wilkins, with power to add to their number."

Dr. Cameron and Dr. Perrigo at once proceeded to enter upon their functions, and twenty-six of the gentlemen present signed forms of application to be admitted as members of the Montreal Branch of the British Medical Association. Dr. Cameron, hon. secretary of the branch, will be glad to have the names of other intending members throughout the city and province in order that as full a list as possible may be at once forwarded to the Council of the Association for election at their next meeting. We wish the branch every success.

## BOOK NOTICES.

**EXAMINATION OF WATER FOR SANITARY AND TECHNICAL PURPOSES**, by Henry Leffman, M.D., Ph.D., Professor of Chemistry in the Woman's Hospital College of Philadelphia, and William Beam, M.A., Demonstrator of Chemistry in the Pennsylvania College of Dental Surgery. Second edition, revised and enlarged, with illustrations. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street, 1891.

As the starting point of many acute diseases depends upon the contamination of water by sewerage, bacteria or some chemical substance, any information leading in the direction of making less difficult the means of discovering these deleterious ingredients must be very acceptable. Such is the purpose of this little book, viz., to act as an aid in making the analysis of water. The contents are divided as follows: History of Natural Waters; Analytical Operations; Interpretation of Results; Biological Examinations; Purification of Drinking Water; Identification of Source of Water; Technical Applications; Analytical Data.

**MEDICAL JURISPRUDENCE AND TOXICOLOGY. A Text-Book**, by John J. Reese, M.D., Professor of Medical Jurisprudence and Toxicology in the University of Pennsylvania; late President of the Medical Jurisprudence Society of Philadelphia; Honorary Member of the New York Academy of Anthropology; Corresponding Member of the New York Medico-Legal Society, revised and enlarged. Philadelphia: P. Blakiston, Son & Co. Price, cloth, \$3.00; leather, \$3.50.

This is the third edition of this volume, and it has been carefully edited and revised so as to bring it up to the present day. Much new material has also been added. This call for a third edition (to quote from the preface), within two years of the last issue is not only flattering to the author, as an

evidence of the kindly estimate placed upon his book, but is especially gratifying as an indication of the increasing interest bestowed upon the subject of Medical Jurisprudence by students and practitioners of both the professions of Medicine and Law throughout the country. Simplicity of style, conciseness and directness of purpose have rendered it one of the best guides extant to the study of legal medicine. Every physician should have a copy of a work of this nature, as the question of medical jurisprudence is one on which doctors and lawyers must fully post themselves, for they are liable at any time to be called upon as experts or counsel. The author explains thoroughly, in the opening chapters, the duties of the physician in medico-legal cases. He describes the observations he should make, the proper method of arranging and preserving such information, and to what, and how, a physician should testify in court. He points out the difference between the position occupied by the physician who is a witness merely as to facts, and his who is called to give expert testimony. Of the two, very different questions are to be asked, and Dr. Reese denounces the methods of cross-examination now so much in vogue. Then follow chapters upon the signs of death, and the detection of the immediate cause, and directions to be followed in making a post-mortem. Chapters on poisoning, feigned disease, pregnancy, criminal abortion, rape, insanity, and malpractice bring the book to a conclusion.

**FEVER: ITS PATHOLOGY AND TREATMENT BY ANTI-PYRETICS.** Being an essay which was awarded the Boylston Prize of Harvard University, July, 1890. By Hobart Amory Hare, M.D., B.Sc., Clinical Professor of Diseases of Children and Demonstrator of Therapeutics in the University of Pennsylvania; Physician to St. Agnes's Hospital and to the Children's Dispensary of the Children's Hospital; Laureate of the Royal Academy of Medicine in Belgium and the Medical Society of London, etc. 12mo, pp. 166. No. 10 in the Physicians' and Students' Ready Reference Series. Price, \$1.25. Philadelphia and London: F. A. Davis.

The book before us comprises the pathology of fever, together with a thorough knowledge of the remedies referred to under clinical observation. This little volume is, without doubt, the best summary of the effects and utility of the antipyretic group of remedies recently discovered hitherto published. It is a most scholarly treatise on which the profession in general need the latest and most thorough researches. The author has executed the task of supplying this much needed treatise in a manner which leaves nothing to be desired. It deserves a widespread circulation and careful study.

**NO. 9 IN THE PHYSICIANS' AND STUDENTS' READY REFERENCE SERIES.** Medical Symbolism in Connection with Historical Studies in the Arts of Healing and Hygiene. Illustrated. By Thomas C. Sozinsky, M.D., Ph.D., author of "The Culture of Beauty," "The Care and Culture of Children," etc. Philadelphia and London: F. A. Davis, Publisher. 1891. Price, \$1.

This is a most valuable little book to physicians and others interested in the mythological aspect of early medicine. The historical features of the volume are of great value, as it gives us a glance at the progress of the science of healing from its earliest beginnings. Medical symbolism is some-

thing of which very little is commonly known. This little book puts the subject before the reader in a very attractive form. As an archaeological contribution to medical literature it is especially valuable. We have read the work with the greatest pleasure, and urge every one interested in such matters to procure a copy.

**AUSCULTATION AND PERCUSSION,** by Frederick C. Shattuck, M.D., Professor of Clinical Medicine in Harvard University. Detroit, Mich.: Geo. S. Davis. 1890. Price, 25c.

This little monograph forms part of the Physicians' Leisure Library Series and is certainly on a topic of great interest. Auscultation and Percussion are the most important means of physical diagnosis, and it therefore behooves all to be familiar with the many ways by which they can be made to subserve the interests of the doctor. Shattuck has written a practical work and one that will be useful to any one who will read it no matter how well versed in physical diagnosis he may be. The plates, after Weil, showing the position of the various organs of the thorax and abdomen are excellent. The chapter headings are: The Lungs in Health; The Lungs in Disease; The Physical Conditions and Diseases of the Pleuræ and Lungs; The Heart in Health; The Heart in Disease; The Pericardium; Thoracic Aneurism; Physical Exploration of the Liver, Spleen, Stomach and Pancreas.

**MANUAL OF THE DOMESTIC HYGIENE OF THE CHILD.**

For the use of students, physicians, sanitary officials, teachers and mothers. By Julius Uffelman, M.D., Professor of internal medicine at the University of Rostock. Translated with the author's permission, by Harriott Ransom Millinowski, edited by Mary Putnam Jacoby, M.D. New York and London: G. P. Putnam's Sons. Price, \$1.75.

Those most interested, namely, mothers, should gladly welcome this work to the household, as at this time of the year when the "heated term" is upon us, nothing is more important, towards securing the child's continued health and welfare, than good hygienic surroundings. It is the professed object of this publication to add the more intelligent mothers to the other classes for whose instruction Prof. Uffelman's book was originally written. The editor has, to this end, interpolated many explanatory notes in brackets, thus modifying the technical phraseology of the work, and bringing it within the range of those possessed of a good, non-technical education. The chapter on "play" is certainly one of the best in the book; it brings out the subject in the most scientific as well as the most sensible manner, and if largely read, as we hope it will be by Canadian mothers, will do much for the benefit of the rising generation.

**WOOD'S MEDICAL AND SURGICAL MONOGRAPHS,** Consisting of Original Treatises and Reproductions, in English, of Books and Monographs selected from the latest literature of foreign countries, with all illustrations, etc. Contents: Influenza Associated with Nervous and Mental Diseases, by Dr. Van Deventer; Technique of Ling's System of Manual Treatment as Applicable to Surgery and Medicine, by Arvid Kellgren, M.D.; Antipyresis, by Prof. Dr. Arnaldo Cantani; Some Urinary Disorders connected with the Bladder, Prostate and Urethra, by Reginald Harrison, F.R.C.S. Published Monthly. Price, \$10.00 a year, single copies, \$1.00. June, 1891. New York: William Wood & Company.



A COMPEND OF ANATOMY AND PHYSIOLOGY, illustrated by the New Model Anatomical Manikin, including a key, a glossary of medical terms, and incidental notes on pathology. Edited and compiled from standard works by M. C. Tiers. New York: Fowler & Wells Company, 775 Broadway. 1891.

### NEWS ITEM.

**HIGHER MEDICAL EDUCATION.**—For some years past even the poorest medical schools in Canada, without any endowment whatever, have adopted the compulsory four years course, which we have always respectfully recommended to our confrères in the United States. It is with especial pleasure therefore that we have received an announcement from the University of Pennsylvania informing us that it is the first in the United States to take this step. On reading between the lines we think we see the influence of our own Canadian, Dr. Osler, who was for some time connected with the University of Pennsylvania.

Higher medical education is the true interest of the public and of the medical profession. Nothing concerns more directly every individual member of the community than that our medical men shall receive a thorough and practical education. In all civilized countries except America from five to seven years are devoted to this purpose, although their students enter the medical schools with better preliminary education than the vast majority of ours enjoy. In each European country there are only a few schools privileged to confer medical degrees, so that it is easy to maintain a high standard. But in this country there are hundreds of medical schools intrusted with this great power and high responsibility. Keen competition keeps down the standard. Until a few years ago it was the rule that only two years' study was required. Conscience revolted at this shocking laxity, and a few schools advanced their standard and established a three-year obligatory graded course of medical study. It was done in the face of much opposition, but it was done successfully, and to-day no medical school has any standing which has not adopted the three-year course. It was known to all who had studied the subject that this advance was but the first step. The number of subjects to be taught has increased; the methods of medical instruction have grown exacting and thorough; above all it is felt that no student should receive a degree which empowers him to enter on the most responsible work of practicing medicine unless he has had ample bedside instruction in every branch of his profession. It is simply impossible to do this in a three-years' course. Students are overworked in the attempt. The more complete the facilities possessed by any school the more evident has it become that one more advance must be made to enable the student to profit by his op-

portunities and to become a well-trained physician. The old cry is still raised that there were eminent doctors in former days who had studied only two years, and that those who graduate now with three years training succeed well in their profession. But every one who advances this argument knows how specious and hollow it is. It is universally admitted by the public and the medical profession alike that it is impossible to-day to give a thorough medical education in less than four full years of actual work in lecture-room, laboratory, and hospital.

The Medical Department of the University of Pennsylvania is the oldest and most distinguished medical school on this continent. The stand taken by this school more than fifteen years ago in lengthening the term and raising the standard of medical study produced the most conclusive effect, because it was attended with such brilliant practical results. Ever since that time its graduates have distinguished themselves by unequalled success in all professional competitions. The advance was effected only by great sacrifices and exertions on the part of the Faculty. All high grade, scientific education is costly and demands great facilities and increased labor. So it will be again. The school which puts into operation a full four-year graded course of medical study must be ready to meet increased outlay and lessened income from students' fees for some years at least. But what is resigned in mere pecuniary profit will be many times over compensated by the lasting influence for good exerted.

At the meeting of the Board of Trustees of the University of Pennsylvania, held May 21st, Dr. Pepper made an offer of \$50,000 towards an endowment fund of \$250,000, and of \$1000 annually towards a guarantee fund of \$20,000 annually, for five years, conditioned upon the establishment of an obligatory graded four-year course of medical study. This was accompanied by a communication from the Medical Faculty, pledging themselves to carry out this proposal, and to enter upon the four-year course in September, 1893. It was also reported that the members of the Medical Faculty had themselves subscribed \$10,000 annually for five years to the endowment fund. The Board of Trustees expressed warm approval of the proposed advance in medical education, but postponed their assent until the success of both funds had been demonstrated.

The approaching completion of the fine Laboratory of Hygiene, built by Henry C. Lea, Esq., will render the medical facilities of this school unequalled. It is to be hoped that the necessary pledges will be secured promptly, as the interests of the entire community are deeply involved in the success of this great advance, which will enable medical students to obtain a thorough practical education in every branch of their profession.



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## Original Communications.

### CLINICAL LECTURE.

#### RETRO-DISPLACEMENTS WITH FIXATION.

By A. LAPHORN SMITH, B. A., M. D., M. R. C. S., England  
Professor of Gynecology in Bishop's College, Gynecologist  
to the Montreal Dispensary, Surgeon to the Women's  
Hospital.

GENTLEMEN,—Those of you who have been attending my clinic here regularly must have been struck by the comparatively large number of patients who have passed through our hands suffering from retroversion of the uterus. I have therefore selected one of these numerous cases for the subject of a few practical remarks to-day. This patient is 32 years of age, mother of one child, five years old, and has had three miscarriages. She had a severe instrumental labor, and what was called a relapse after her first child, was very ill in bed six weeks after that, and has never been well since. Her periods come on every three weeks, are painful, and last eight days; locomotion, coitus and defecation are painful, and she has to force to pass water. She is nervous, despondent, swells after eating, and lumps gather in different parts of her abdomen which, after causing great pain seem to burst and disperse, giving her great relief. Her bowels are constipated, and her tongue is coated and pasty. She has a pain in her head, under her left breast and in

her back; she has a profuse leucorrhœa, and is also troubled with piles. Such are briefly the symptoms of which she complains; and at first sight they are so numerous and located so widely apart that you might think it difficult to interpret them; not so however to the gynecologist. When she first came here some weeks ago and recounted the above story of her sufferings I ventured to predict what we would find. I shall now ask one of the senior members of the class to step forward and examine her and with my assistance to explain the course her disease has taken. Now, we will bring the patient, who is on her back, well down over the edge of the table with her feet on these two sliding supports. I will require the gentleman who is to examine her to scrub his hands and nails with plenty of hot water and soap by the aid of the nail brush, and to then anoint the two fingers of the right hand with the mixture of soft soap, glycerine and carbolic acid provided for the purpose.

Now, sir, what do you notice about the perineum? Student—It is badly lacerated and there is a rectocele.

What do you notice about the anus? Student—It is surrounded with hemorrhoidal tumors, and by introducing my left finger into it and pressing it forward I can make the rectocele project through the vulva.

Why do you use your left finger for exploring the rectum? Student—Because I am keeping my right one for examining the vagina.

What do you notice on examining the vagina? Student—That the cervix is far forwards close behind the symphysis pubis instead of far back near the sacrum: 2nd. That it is lacerated bilaterally and covered with a velvety surface dotted over with cysts; 3rd. That I can run my finger along the whole posterior surface of the uterus until I reach the fundus which is lying in the hollow of the sacrum, and pressing on the rectum, and the organ is about twice its normal size.

Now, place your other hand on the abdomen, and as the patient is very thin you will probably be able to make out the tubes and ovaries; can you feel them? Student—I think I feel the left ones adherent to the side and slightly behind the uterus, and the right are rather more forward, but the examination causes her too much pain for me to make it thorough without an anæsthetic.

Can you by introducing your two first fingers behind the uterus lift it up into a position of anteversion? Student—No, the uterus seems fixed there hard and fast.

Now, gentlemen, let me give you the reasons for what we find. All this woman's troubles began with her first confinement, the first and second stages of which were either naturally or artificially passed through before the cervix and perineum had had time to dilate; the result was a laceration of both. The confinement unfortunately was an infected one, and the patient then had a metritis and salpingitis, the purulent discharge from which leaked out of the tubes by gravity and infected the ovaries, and dropping into the Douglas cul-de-sac, set up local pelvic peritonitis. During this time the patient had been kept rigorously on her back so that the heavy uterus fell backwards on to the sacrum where it was then firmly fixed by the pelvic exul-

tion. At first this was only soft and flaky lymph thrown out as a guard wall by the peritoneum to save its whole extent from infection, but now that lymph has become firmly organized and will require considerable effort in order to tear through it. After this woman recovered from her pelvic peritonitis and began to go about, her intestines and in fact the whole intra-abdominal pressure had to be supported by the anterior surface of the uterus, instead of by the posterior surface, so that the tendency would be for the uterus to be forced more and more upon the rectum and sacrum. This pressure obstructs the return of the venous blood in the walls of the rectum, and hence the hemorrhoids. Then again the enlarged fundus uteri acts as a valve or stopper on the rectum, so that the more the patient forced or strained at stool the closer the rectum would be closed; defecation would be therefore so painful and difficult that it is not to be wondered at that she neglected her bowels for many days at a time. Her system is being poisoned by the gases coming from the decomposition of fæces. Moreover the sigmoid flexure has become loaded and is pressing so hard upon the left ovarian and left internal iliac vein that the uterus has become very congested, and the ovary so much so that it is exquisitely tender to the touch. When she walks the heavy uterus knocks against the sensitive ovary, so that she does not dare take exercise, while as for coitus she says she has to scream with pain when her husband attempts it. This has rendered her marital relations very strained. Now a word as to her miscarriages. The commonest cause of miscarriages is syphilis, but this disease she has never had. In her case they have been undoubtedly due to the retro-displacement; for when the uterus has reached the stage of three months of pregnancy it completely fills the pelvis, and if it cannot rise out of the pelvis it must burst the pelvis or expel its contents, which latter it of course does. This reminds me of a case which started one of my former students out into a fine

practice. He had begun without money or friends in a small town, and in the absence of the family physician was called in to attend the principal young married lady of the place. She was in frightful agony, and on making a digital examination he found the three months pregnant uterus retroverted and jammed under the hollow of the sacrum. Placing the patient in the knee-chest position he was able with some effort to disengage the organ, when in a moment her pain was relieved and she was subsequently delivered at full time. Such treatment would not avail in the case before us, simply because it would be impossible to lift this uterus out of the pelvis. The prolonged periods which have so much reduced her strength are due to the spongy congested condition of the endometrium. I could arrest both the bleeding and the pain by dilating the cervical canal, curetting away the whole lining membrane of the uterus and applying carbolic acid and tincture of iodine to the cavity. But this treatment would not give a permanent result, because the causes would still remain. With regard to the difficulty in passing water this may be due to one or all of three causes, first a lacerated cervix often leads to more or less reflex irritation of the other sphincters; secondly, the cellular tissue surrounding the bladder is frequently affected to such an extent after a laceration of the cervix as to cause cicatricial bands to be formed, and these latter are constantly dragging at the bladder; thirdly, the fundus uteri being in the hollow of the sacrum the cervix is displaced forwards behind the symphysis pubis, and as the enlarged uterus measures more in length than the distance between the sacrum and urethra, the latter is compressed by the cervix uteri. The laceration of the cervix explains of course the reflex disorders of the great sympathetic nerve which supplies the intestines and stomach, the heart, and in fact all the blood vessels.

Now what can I do for such a case as this? I will try during a month or two to

soften and stretch these adhesions by painting the vaginal roof with tincture of iodine, boroglyceride tampons and hot douches, and by frequent gentle manipulation of the uterus by means of two fingers in the vagina and my other hand on the abdomen. If I fail at the end of that time to get the uterus to stay out of the hollow of the sacrum, I will strongly urge the patient to submit to abdominal section and I will then tear the uterus away from its adhesions and after having roughened the anterior surface of it by scratching with a sharp needle, I will sew it to the abdominal incision with silk worm gut sutures which I will leave in for several weeks. If there is much oozing from the torn adhesions, I will leave in a glass drainage tube for a day or two until it has stopped. Such a laparotomy has almost no death rate and by no other means can we accomplish our purpose. Alexander's operation is out of the question because the uterus must be entirely free for it to be available. I shall invite you in the course of a few weeks to witness what little there is to be seen while I am performing the operation, which is done more by the sense of touch than by sight. The less the contents of the abdomen are exposed to view the better for the results of the operation.

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## Society Proceedings

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### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

#### THE LATE DR. MACDONNELL.

At a special meeting of the Medico-Chirurgical Society a resolution was moved by Dr. Hingston, and seconded by Dr. T. Wesley Mills, expressing their deep regret at the death of the late Dr. Richard L. MacDonnell. The resolution was as follows:

Resolved, that this society records, with the deepest regret, its sense of the loss which it has sustained in the death of Dr. Richard Lea MacDonnell, one of the most able and efficient members, who not only took part in its debates, but



case of abortion, it becomes evident that we should fully understand the process Nature requires to be fulfilled, and how the result is accomplished, and how we may best render assistance when it is required. We should also understand when Nature is able to effect the various steps necessary to a safe and perfect result.

By an abortion, then, we mean an expulsion of the contents of an impregnated uterus any time within the period of the first three or four months of impregnation. After this period, or during the fourth, fifth, sixth and seventh months, should such expulsion take place, we term it a miscarriage, and after the seventh month to full term it is called premature labor.

Now, in order that we may grasp the significance of abortion, as I have said, it will be necessary for us to familiarize ourselves with the physiological condition of the uterus after the ovum shall have entered its cavity, and, having done that, we can readily see the processes to be performed when, from any cause, the ovum shall be separated and expelled. It has been shown that the uterine mucosa, in way of preparation for the reception of the ovum, is thickened about ten-fold, becomes more vascular, and is thrown into numerous folds or convolutions, due to the increase of the cellular elements, this producing a soft, pulpy bed for the reception of the ovum. This soft, thick mucous membrane is known as the decidua vera. In this decidua vera lodges the ovum, and the surface under the ovum, made up of the decidua vera, is now known as the decidua serotina, and is the beginning of the *placenta*. Folds of the decidua vera grow up around the ovum, and finally meet and enclose it in a cavity of its own, shut off from the general cavity of the uterus. These folds of the decidua vera now become known as the decidua reflexa. During the first two months the foetus is surrounded by a shaggy enveloping membrane, through which it draws its nourishment. At the end of this time this villous membrane becomes bald in its outer aspect down to the third of its surface, which lies most intimately attached to the uterine mucosa, and is now to be the placenta. Thus we see that a formed placenta does not exist until about the third month, or the termination of the period in which we may have an abortion.

The foetal membrane or chorion is intimately applied to the maternal or decidua membrane. The decidua vera is not shed and expelled naturally in every case, until the term of gestation shall have expired, at which time it is thrown off by a very moderate degree of contraction of the uterus, without much hæmorrhage (except when the placenta is attached) this constituting complete gestation and parturition. Now that the office of the decidua has been fulfilled, at full-term delivery, a new membrane is developed underneath, ready to supply the place

of the old to be exfoliated, and this protects the intra-uterine muscles.

With this brief physiological examination of the processes taking place in the uterine mucous membrane during gestation, and especially in the early stages, we must be impressed with the fact that Nature has placed in the uterus a thickened membrane with certain offices to perform, requiring for their perfection the period of nine months, or a normal gestation; hence, whenever we have an abortion, from any cause whatever, we have a pathological condition to treat, and in this no more than in any other pathological condition can we leave it to Nature in every case; nor, on the other hand, can we profitably do that which shall defeat a natural or philosophical process. We must be impressed, it seems to me, that the treatment should be almost unanimous, or having the same end in view, viz.: the removal of the decidua, maintenance of perfect asepsis, and drainage. Now, when we shall have so treated a case as to fulfil these indications, we shall have done all that can be done in averting conditions of sepsis which are attended with serious results to the patients, in the shape of septic endometritis, metritis, salpingitis, abscess, etc.

Let us examine now some of the more common methods of treatment employed, and note the result in not a few cases. Perhaps the most orthodox plan of treatment in the majority of instances is, if the foetus is expelled, to give ergot and retire. If the cervix is partially dilated, with the membranes protruding, ergot is given to expel them. If the cervix is not dilated, and an abortion is imminent, a tampon is used, if anything is done. When the foetus is expelled a finger is introduced, and the clots and some of the membranes which are loose are cleaned away. A possible vaginal douche completes the antiseptics of the case. The patient gets ergot, and possibly quinine, for a few days until she recovers or develops a septicæmia, which sometimes receives the proper care and saves the patient; or she may go on and die, as do not a few every year.

Now let us see if there are not certain indications to be met in every case of evacuation of the uterus before the fourth month. We have seen the uterine mucosa developed into a thickened protective or receptacle, so to speak, destined to do a certain work for a certain period, viz., for nine months time, then to be exfoliated, being supplanted by a submucous membrane destined to replace the decidua. Such, however, is not the case in these earlier months, and yet a process of disintegration and shedding must take place, and a new membrane follow. This disintegration consists of a fatty degeneration, a dissolution and discharge, called the lochia. If, then, the uterine cavity is to be freed of its membrane, which has by the separation of the ovum been in a greater or less degree

injured, we see as a first consideration the necessity of free drainage; hence we conclude that ergot, which causes uterine contractions and closure of the cervical canal, is contra-indicated. To me the rational plan would seem to consist in cleaning out the uterine cavity of all its contents at once—membranes of the embryo and decidual membrane of the uterus—thus removing the possible cause of sepsis, checking hæmorrhage, and facilitating early involution and a safe convalescence.

By the use of the dull curette, the os being freely dilated, the uterus should be cleaned perfectly, then swabbed out with pure carbolic acid or tincture of iodine, and ample drainage maintained by some means—my own preference being for iodoform gauze—leaving it in place for twenty-four or thirty-six hours, to be replaced after an intra-uterine douche of bichloride. Small doses of ergot and quinine, and possibly iron, may then be given to assist in the process of involution. I am convinced that when left to themselves these cases not infrequently, even when credited with making an unusually good recovery, go on to a state of ill health, though without symptoms which alarm or disturb the patient sufficiently to cause her to consult a physician. Perhaps the larger part of all cases of chronic tubal troubles date their bad feelings to the time of a previous abortion.

Miscarriage, or even parturition, may figure, as do these cases of abortion, in originating an endometritis, which travels up through the tubes to the ovaries, setting up a salpingitis, peri-ophoritis, or peritonitis, with all their attending ills. One of these cases may run an insidious course without developing any *well-marked* pelvic peritonitis, and present a history something like this: Trouble with lower bowel, rectum, bladder, menstrual disorders, soreness, with indefinite pains, tenderness on palpation, etc. Colicky pains are common if salpingitis is present. These pains are sudden and lancinating, in the region of the tubes, or possibly in the hypogastrium; sometimes suddenly ceasing, followed by a discharge of more or less bloody, serous, or purulent material from the uterus, often thought by the patient to be leucorrhœal. These pains are not infrequently thought to be colic of the uterus; but with this history, if a vaginal examination is made, a small tumor will frequently be found on one or both sides. This same process of inflammation continues, and finally glues the fimbriated extremities together, causing sterility. Again, no appreciable amount of fluid may be contained in the tubes, and yet the inflammation may have caused a thickening of the coats of the tube (interstitial salpingitis), which can be detected through the vagina as a *rope cord*. These conditions are amenable to no other treatment, in by far the majority of cases, save the removal of the uterine appendages, which renders the woman incapable of perform-

ing her mission in its fullest capacity as a child-bearing woman. Hence we see the very imperative demand for such prophylactic measures as shall forestall such disastrous results, which are obtained by antiseptic conditions of the uterine cavity at all times, and especially in cases of abortion, by rapid dilatation with steel dilators (not by tents), a thorough, carefully executed curetting, followed by systematic drainage until the uterine cavity shall have assumed a normal condition capable of taking care of itself.

Since writing this paper I have noticed a paper by Winter, of Berlin, in which, after analyzing 100 cases, he arrives at the conclusion that "the decidua vera can be left undisturbed—only loose shreds should be removed—as but nine patients completely shed the decidua; hence I feel warranted in assuming that safety to the patient demands the careful use of the curette to examine the uterine cavity, and if any decidual shreds remain (as I am confident they do in by far the greater percentage of cases) remove them. I consider the curette safer than the finger, and more effective. The results of retained decidual membranes may not be observed at once, but even at the end of one, two, or more years its effects will be noted upon the ovaries and tubes."

Finally, the conclusions at which I arrive may be summarized as follows, viz.:

1st. An abortion is a pathological process, involving the premature expulsion of the fœtus and membranes from the uterine cavity, which, normally, have an existence of nine months before they shall have completed their physiological intention.

2nd. That such expulsion is generally incomplete when left to Nature, thus exposing the patient to subsequent pathological conditions or possibly death.

3rd. That every cases should receive a careful examination by the use of the blunt curette in preference to the finger, as it is safe, easier of introduction, and more effective.

4th. Complete removal of all membranes, maternal and fetal, offers the greatest protection and safety to the patient.

5th. Perfect asepsis and drainage is a necessary supplement to the curette.

6th. Ergot has little or no effect in the treatment of cases of abortion. If used at all it should be in the late stages to assist involution. —*Med. News.*

—————  
Bodet's Hair Tonic consists of the following:

R. Carbolic Acid,  
Tincture of cantharides, each, 30 mins.  
Tincture of nux vomica, f3ij.  
Compound tinct. of chinchona, f3j.  
Colonge water, f3j.  
Cocconut oil, enough to make, f3iv.

This is to be applied to the scalp twice daily with a small sponge.—*American Druggist.*

## WORMS IN CHILDREN.\*

By Oliver P. Rex, M.D., of Philadelphia, Physician to the Jefferson Medical College Hospital.

GENTLEMEN,—The first case that I shall show you has the following history:—

This child, aged four, healthy at birth, raised from the breast, was well until it reached the age of ten months. Since this time it has been troubled with cough. The cough is decidedly worse at night. It expectorates very little. Appetite sometimes very good, at others poor. Very restless in its sleep.

Notice, please, that the cough is worse at night; this is important from a diagnostic standpoint, for whenever you have cough which is more troublesome after the patient has retired, think of its being reflex in nature. By that I mean a cough which has as its cause not an irritation in the lungs, but at some distant point. As example, we have reflex coughs from ear disease, worms, indigestion, etc. The pupils are somewhat dilated in this case, and the pulse irregular. With such a history as this in a child, think of worms, but remember this, that there is no single symptom except the finding of worms in the stools, which is diagnostic of them. In this child one worm was passed after the administration of proper remedies, since the expulsion of which the child sleeps well at night, appetite is good, and the cough has disappeared.

Lumbricoid worms are found generally in the jejunum and ileum, but they wander wherever they can. Then they have been found in the stomach, œsophagus, larynx and trachea. One even travels into the right bronchus. The mouth, nose, biliary and pancreatic ducts, and gall-bladder have in different cases been occupied by these worms. A case is reported where a worm worked itself into the vermiform appendix, causing erosion and finally perforation with its consequent symptom.

If worms are present in the alimentary canal, there is always an abundance of mucus present. A gastro-intestinal catarrh also exists. This is due to the moving about of the worm. In fact, I doubt very much if the lumbricoid worm can live if these two conditions are not present.

Whenever you have in a child over two years a pallid face, unequal dilatation of pupils (which is said by one authority to be more common than equal), an appetite which varies,—one day good and the next poor,—restless at night, grinding its teeth in its sleep, etc., colicky pains, and a distended abdomen, think of worms.

*Treatment.*—In this case the following prescription was given, after which a dose of oleum ricini was exhibited:—

R Hydrargyri chloridi mitis,  
Santonini, aa gr. iv. M.  
Fiant chart v.

Sig.—One powder three times a day.

\* A Clinical Lecture, delivered at Jefferson Medical College Hospital (*Archives of Pediatrics*, January, 1891.)

Since every female worm has the power to create sixty million worms, whenever only one or two worms are passed, we should always be suspicious that more are present, and I believe that in any case it is a good rule to continue the treatment for a short time after the expulsion of the worms.

A prescription which I like very much is this:—

R Santonini, gr. viij  
Ext. spigelie et sennæ fluid., f ʒj Mj  
Sig.—One teaspoonful three times a day.

This should be followed by a dose of castor oil. The further treatment of lumbricoid worms is to correct the diseased state of the mucous membrane. The diet should be carefully regulated, only the most digestible and non-irritating food being taken, such as milk broths, etc. Of drugs, ten-drop doses of dilute hydrochloric acid with a little pepsin are generally sufficient to bring about the change.

Children become infected with lumbricoid worms by drinking water containing the eggs, or by eating food to which they are adherent. These eggs then develop in the system into the worms. In the case of the tapeworm, the life history is a little different. The eggs are passed in the stools of the patient. The development of these eggs takes place not in the human system, but in one of the lower animals—in the case of the *tænia solium* in the hog, and in that of the *tænia mediocanellata* in beef. In the muscles of these animals are developed cysts—the so-called *cysticerci cellulosa*—which contain the embryo of the tapeworm. Now, when a person eats raw or imperfectly cooked meats of animals which are infected, these cysts develop into the tapeworm.

When treating a patient with a tapeworm, unless you succeed in removing the head, a cure will not result, for the segments grow from the head. Now, there are two ways of looking for the head in the passage. One is to pour some carbolic acid (to destroy the odor) and water into the vessel; then do not stir with a stick, but merely shake; allow to settle, and pour off all but the sediment. Continue this until all fecal matter is removed, then examine the sediment for the head. Another way is to pour the passage into a piece of muslin. On this pour water, and continue doing so until all fecal matter is washed out, then examine residue for the head. If you do not find the head you cannot be safe that the worm will not return until three months have elapsed.

*Treatment of Tapeworms.*—The Germans have discovered three articles of diet which are obnoxious to worms, viz., onions, garlic and herring; of these they make a salad.

Before giving any medicine for a tapeworm the patient should fast for twenty-four hours, taking only a little milk and water or a little



broth, but just sufficient to sustain life. At the end of this period a mild laxative may be given, after which the vermifuge should be exhibited.

To a child give an ounce of pumpkin seeds (after the cortical portion has been removed), and to an adult two ounces. These should be finely powdered in a mortar, and then mixed with sugar and milk. Several hours afterward a dose of castor oil should be taken.

Two other remedies which act very nicely against the tapeworm are male fern and pelletterine.

In searching for the head of a tapeworm a piece of muslin should be tied securely around a bucket, and the diluted faecal evacuations poured upon it; this acting as a fine sieve, the liquid portion passes through, while the segments remain upon the muslin for closer scrutiny.—*Coll. and Clin. Record.*

### ANTISEPTIC ACCOUCHEMENT.

In the *Journal de Médecine* for February 25, 1891, Lucas-Championnière furnishes a condensation of the various antiseptic precautions observed in the different French maternities. In the service of Professor Pinard in the Baude-loque clinic, care is taken to clean the waiting wards daily with pieces of linen cloth moistened in a solution of the biniodide of mercury of the strength of 1 to 2000. The labor wards are cleaned in the same way several times daily. When the patient enters the maternity ward, if the stage of the labor permits, she is given a bath, and the external genitalia are washed first with soap and then with the biniodide solution. The woman then receives a vaginal injection of the biniodide solution, 1 to 4000, and a square of tow soaked in the biniodide is placed over the vulva. Every three or four hours a new injection of the biniodide is given, especially if there have been frequent examinations made; other injections are given after the birth of the child, and two hours after delivery the woman is carried into the ward for puerperal women. The cord of the child receives a dressing of sublimated wadding, and the breasts of the mother are covered with boricized cotton. Immediately after birth the child receives an instillation of lemon-juice into the eyes. This prophylactic measure has given excellent results. The eclamptic or albuminuric women receive injections of a saturated solution of naphthol. During the puerperium, in case of fetid lochia, vaginal and intra-uterine injections are given, and should there be fever which persists, the woman is isolated and placed under continued irrigation with phenic water, 1 to 60. In case of an operation upon the vagina or perineum, a piece of iodoform gauze is placed in the vagina and upon the vulva. After each operation the metal instruments are heated in the alcohol flame—ex-

cept the cutting instruments—and then placed in a solution of phenic water, 1 to 20. Rubber instruments are kept in a glass containing the biniodide solution. The antiseptic substances employed are:

1. The solution of the biniodide of mercury, according to the following formula:

R. Biniodide of mercury, } of each  $7\frac{1}{2}$  grains.  
Iodide of potassium, }  
Water, 9 ounces 4 drachms.—M.

This solution is employed pure for the toilet of the hands after careful brushing and washing with soap. It is diluted with one-half of its volume of warm water for injections and dressings.

2. The phenic water employed is the strong solution, according to the formula of Lister, 1 to 20.

3. The vaseline which is used for making examinations contains phenic acid, 1 to 50.

Professor Pinard has never had a local or general accident of mercurial origin since he has adopted the employment of the solution of the biniodide of mercury. The solution has no disastrous effects upon the hands of the operators.

Guéniot, surgeon of the maternity, employs as an antiseptic phenic acid, and has always obtained the best results. He uses the hundredth solution for the living tissues, and the twenty-fifth for the fumigations or the washing of the instruments. The concentrated solution may produce an erythema; the solution in use, the hundredth, is by no means dangerous, and has never produced poisoning, either as a vaginal or intra-uterine injection. When called to attend a patient in private practice, Guéniot employs a phenic solution of the following strength:

R. Distilled water, 9 ounces 4 drachms.  
Phenic acid, 10 drachms.—M.

For living tissues this solution is diluted to about three times its volume with water, and is then used for washing the external genitals, for vaginal injections, and for the antiseptics of the hands of the accoucheur and his assistants. For disinfecting the beds, the soil, the walls, and wash-basins, sublimate solution is employed. This solution is of the strength of 1 to 4000. It is also occasionally used for washing the external genitals and for vaginal injections. A strong solution of phenic acid (10 drachms to 9 ounces 4 drachms of water) is used for the instruments. Examinations are made as rarely as possible, and the lubricating body is boricized vaseline. During labor, solutions of antiseptic materials of weak strength are injected into the vagina. Labor terminated, the eyes of the infant are washed with boiled water, or with a weak solution of sublimate, or one drop of a weak solution of silver nitrate, neutralized by salt, may be employed. The cord is dressed with a small piece of antiseptic wadding. The dressing of the mother consists of a tampon of iodoform gauze,



During the following days, and twice daily, an abundant vaginal injection is given. In case of an operation, the following antiseptic precautions are taken: 1. Phenic fumigation of the operating ward by permitting a four-per-cent. solution of phenic acid to boil in the free air; 2. The instruments are boiled in a strong solution of phenic acid (1 to 25); 3. The sponges are composed of pieces of tarlatan boiled in the same solution; 4. Disinfection of the hands; 5. Dressing of the iodoform gauze of commerce.

Porak, in the Hospital Lariboisière, observes antiseptics largely as above. When a woman enters the hospital she is placed in a bath and cleansed with soap. The genital organs are washed in soap, brushed, and bathed in a solution of sublimate, 1 to 1000. After this disinfection compresses soaked in antiseptic solutions are placed over the vulva to prevent later infection. During labor, injections of sublimate, 1 to 2000, are used. Examinations are made as seldom as possible, and then only with every antiseptic precaution. Phenic vaseline is employed as a lubricant. Porak prefers, however, the following preparation:

R. Vaseline, 3 ounces 5 scruples.  
Corrosive sublimate,  $7\frac{1}{2}$  grains.

Alcohol (to dissolve sublimate) qt. suff.—M.

Intra-uterine injections are reserved for cases where a macerated foetus exists, in cases of obstetrical interference, or where vulvar lesions are suspected. In case of a tear of the perineum iodoform gauze is used. The eyes of the infant are bathed in a concentrated boric solution. If the mother has a vaginal discharge, a few drops of this solution of silver nitrate is employed instead.

R. Distilled water, 5 ounces.  
Silver nitrate, 15 grains.—M.

In case of retention of the membrane, fetid lochia, or tear of the perineum after unsuccessful union by first intention, vaginal injections are used together with intra-uterine injections. The corrosive sublimate solution for instruments which do not amalgamate is as follows:

R. Distilled water, 9 ounces 4 drachms.  
Tartaric acid, 4 scruples.  
Corrosive sublimate, 15 grains.—M.

The solution of 1 to 2000 is reserved for the hands.—*Med. News.*

Professor Holland directs that, in making ferric hydrate, the *antidote for arsenic*, calcined magnesia or aqua ammoniac in excess should be added to tincture of chloride of iron, both being well shaken up together. In this way, f3iij of the tincture of chloride of iron yield enough of the ferric hydrate to be an antidote for ten grains of arsenious acid.

## CLINICAL SUGGESTIONS FROM CASES OF "LA GRIPE."

By Samuel S. Wallian A. M., M. D., of New York.

Ignoring the question of the nature and etiology of this prevalent and somewhat treacherous malady, whether of zymotic or telluric origin, a specific germ disease or an epidemic influenza, of an unusual and unaccountable type, the characteristic, persistent and decidedly serious complications and sequelae of "la grippe" make its clinical study a matter of intense and immediate importance to every physician, as well as to every inhabitant of the country.

In most of the larger cities, as well as in the rural communities, it is at this moment epidemic, and is sending the death-rate to a figure which may well be a cause of alarm to the most conserving and indifferent of the profession.

It would be preposterous to assume that the rapidly increasing death-rate from pneumonia and other sudden and fatal forms of respiratory disease, from "heart failure"—which has become a popular as well as a professional fad—and from the various other manifestations of a condition of general vital prostration, which follows so closely in the wake of this prevailing malady, are attributable to an old-fashioned influenza, or periodical and rather eccentric "bad cold," which is to be annually expected and combated.

At the first announcement of the scourge it was greeted by the press and the public with a good deal of badinage and an effort at grim humor. It was presumed to be a rather disagreeable but comparatively harmless Russian joke, and the daily press found in it a stock source of humorous sarcasm. All this is changed. Funeral notices have crowded out the funny corner, and the question of how to cope with the new foe to life is now admitted to be of the most serious importance.

The vital point is not so much as to technical origin and microscopical curiosities of the disease, but *what shall we do for our patients?*

The nostrum venders are reaping a rich harvest, measured in dollars, by proclaiming loudly that each of their mixtures, from Ayer's Pectoral and Antipyrine to Scott's Emulsion, is a specific for the disease. No doubt, hundreds of cases have been aggravated, or made unnecessarily fatal, by indiscriminate drugging, under the direction of domestic advisers and reckless counter-prescriptions. Nor has this ill-advised drugging been limited to the laity and the unscrupulous pharmacist. Routinists in the profession have done their share, have relied on those fatal make-shifts, the anodynes and antipyretics, and as a result have inexcusably swelled the death-rate, while adding nothing to our knowledge of the pathology or therapeutics of the disease. For this reason many of those who have treated a large number of cases have nothing of value to offer as a result of their experience. As is true

in all new or uncommon manifestations of disease, better half a dozen cases in the hands of a thinker than a thousand under the monotonous *régime* of the mere routinist.

From the loaded condition of all the secretions it is evident in these cases that the blood is from some cause seriously poisoned. Whether that poison is produced by a microbe inhaled from the air—a mode of accounting for otherwise quite unaccountable diseases and infections now quite in vogue—or is absorbed from some other source, may some time be demonstrated. The first indication is prompt and efficient elimination by every available channel. Purgation is hardly allowable, in view of the extreme prostration which is so common a feature. Diuretics are both uncertain and inefficient, although they may sometimes be found auxiliary to other measures. The skin and lungs are unquestionably the most efficient organs through which to operate. In case of robust patients, an efficiently managed Turkish or Turko-Russian bath at the outset is one of the promptest measures at command. It relieves congestions, causes rapid elimination, and equalizes the circulation better than any measure I have tried. Few patients are too weak to bear this measure, if it be intelligently adapted to each individual case. When for any reason it is not available, I substitute the full hot bath, and direct that this shall be as hot as can well be borne for five or ten minutes, after which the temperature may be reduced, or the extra hot immersion may be followed by a momentary shower of quite cool water. To the hot bath, as a detergent, I add bicarbonate of potash or soda, or preferably, refined borax and aqua ammonia, or eau de Cologne, which makes it both stimulating and refreshing. If the shower be omitted it should be replaced by a rapid splash, or hand-douche of cool, but not shockingly cold, water—which latter is too often heroically advised.

This is to be followed by a thorough and free use of measures which directly facilitate oxidation of the morbid elements existing—whether *absorbed* or *developed* we need not stop to inquire—in the blood. First of all, place the patient in a large, airy, and well-ventilated room. See to it that the room is not crowded with upholstery—thick, fluffy curtains, plush furniture, and heavy, absorbent carpets. It would be well to observe all the precautions which are deemed desirable in case of the more decidedly infectious disease. The readiest method of disinfecting and rendering the sick-room aseptic is by means of peroxide of hydrogen, which is to be thoroughly sprayed about the room every two or three hours. Simple as the process is, it becomes a most valuable adjunct to other measures. It not only disinfects in a most natural and efficient manner, it also liberates free oxygen in an extremely active or ozonized condition, and thus directly contributes toward the main object.

Any good hand atomizer, which has either glass or hard-rubber tubes, will answer the purpose. Metal tubes are not allowable in connection with the peroxide. In extreme cases a constant spray of peroxide solution (10 to 15 vols.) may be kept up by means of any good nebulizer attached to an air-receiver, worked by a hand-pump.

Add to this free and frequent inhalations of pure oxygen, to the extent of from 15 to 25 gallons per diem. See to it that these inhalations are properly performed, and not left to the careless and inefficient manipulation of an inexperienced nurse or other attendant. To prevent sequelæ, these inhalations should be kept up for a week or two after convalescence has fairly set in. Oxygen will be found to do efficient service in restoring tone to the impoverished blood, and through this to the entire vital organization. It promotes digestion and assimilation, and has no possible drawbacks to its free and persistent use. Sometimes this method, the inhalation of this gas, proves ineffectual—as from the abnormal condition of the respiratory mucous membrane, coupled with imperfect inspiratory efforts on the part of the patient. In these cases it will be amply worth while to take the trouble to administer the gas *per rectum*, or, after Valenzuela, hypodermically. By either of these methods it is quite promptly absorbed, and soon shows its good effects.—*Medical News*.

#### PRESCRIPTIONS FOR FLATULENCE.

*Journal de Médecine de Paris* gives the following prescriptions for the relief of flatulence:

R. Naphthol,	1 drachm.
Carbonate of magnesium,	1 “
Powdered charcoal,	1 “
Essence of peppermint,	2 drops.

This is to be divided into 15 powders, and 1 taken at the beginning of each meal.

When the flatulency is accompanied by constipation the following may be used:

R. Magnesium,	1 drachm.
Flowers of sulphur,	1 “

To be made into 15 powders, 1 of which is to be taken at each meal.

When diarrhœa accompanies the flatulency:

R. Bicarbonate of sodium,	30 grains.
Prepared chalk,	15 “
Powdered nux vomica,	3 “

May be made into 10 powders, 1 of which is given with each meal.

In still other cases, where neuralgia of the stomach or true gastralgia accompanies the tympanites:

R. Hydrochlorate of cocaine,	4 grains.
Quinine sulphate,	6 drachms.
Cinnamon water,	8 ounces.

Dissolve, and order a tablespoonful every two or three hours.—*Med. News*.

## TREATMENT OF JAUNDICE.

According to *La Semaine Médicale*, Carreau employs with great success the oil of turpentine in large doses in the treatment of severe jaundice. He believes that its value depends upon its diuretic and hæmostatic properties, and he uses it in all conditions of severe disease, such as in infectious jaundice, bilious fever with hæmoglobinuria, and yellow fever, particularly if anuria and hæmorrhages are present. In grave cases as many as sixty capsules, containing two or three drops, are given in thirty-six hours, the dose being given as frequently as every half hour. Where vomiting prevents their action he administers oil of turpentine hypodermically in the following formula:

- R. Ozonized oil of turpentine,  $2\frac{1}{2}$  drachms.  
Liquid vaseline, 3 ounces.

The following cases are detailed by Carreau as instances in which this treatment was of service. The first of them was that of a woman suffering from severe icterus with profound coma and uremic convulsions. Three drops of the turpentine were given every half hour for the first few hours, and after that two drops. Simultaneously with the appearance of the peculiar violet odor of the urine, produced by the turpentine, the albuminuria decreased, the coma became less, and soon passed into simple somnolence, so that convalescence was soon established.

The second case was suffering from yellow fever, accompanied by persistent vomiting, and in this instance twenty-three hypodermic injections of oil of turpentine were made in thirty-six hours. The symptoms rapidly ameliorated, and the patient recovered, although he afterward suffered from two abscesses as a result of the injections. In still another case which was suffering from bilious fever with hæmoglobinuria, the administration of the turpentine every hour or hour and a half was without effect, and it was only when three drops were used that the symptoms rapidly ameliorated.—*Med. News.*

## TREATMENT OF CANCER OF THE STOMACH.

*Journal de Médecine de Paris* states that Dujardin-Beaumetz secures gastric antiseptics in cases of cancer of the stomach by the use of salicylate of bismuth, naphthol or salol, prescribed in the form of capsules, made as follows:

- R. Salicylate of bismuth, } of each  $2\frac{1}{2}$   
Calcined magnesium, } drachms.  
Bicarbonate of sodium, }

To be made into 30 capsules, or,

- R. Salicylate of bismuth, } of each  $2\frac{1}{2}$   
Betanaphthol, } drachms.  
Charcoal, }

To be made into 30 capsules, or, again,

- R. Salicylate of bismuth, } of each  $2\frac{1}{2}$   
Salol, } drachms.  
Bicarbonate of sodium, }

To be made into 30 capsules.

For the relief of the pain he uses laudanum, or opium pills, or hypodermic injections of morphine, associated with atropine, as, for example, in the following prescription:

- R. Hydrochlorate of morphine,  $1\frac{1}{2}$  grains.  
Neutral sulphate of atropine,  $\frac{1}{10}$  grain.  
Sterilized water, 6 drachms.

Twenty or thirty minims of this may be given at a dose.

The objection to this treatment is that the constant use of morphine may produce the morphia habit, but in the majority of instances the disease progresses so rapidly that this danger is not of any importance. The diet should be absolutely vegetable in its character. The stomach should be allowed to rest as much as possible, and the physician endeavor to use such foods as will be digested by the intestine. This is particularly important in view of the fact that in the majority of cases of cancer there is a diminution in the digestive activity of the gastric juice. When the cancer is at the pylorus, lavage may be practiced, but if it be at the cardiac end of the stomach this measure is not to be resorted to. The solution employed in washing out the stomach should consist of naphthol in the proportion of 1 to 1000.—*Med. News.*

## TREATMENT OF WHOOPING COUGH.

Löffler recommends the following solution to be used in the treatment of whooping cough:

- R. Freshly prepared chloride of }  
silver,  $1\frac{1}{2}$  grains.  
Water, 2 pints.  
Hyphosulphite of sodium, a saturated solution.

Use by an atomiser, the liquid being directed into the pharynx. Repeat the application every two or three hours. This treatment is both prophylactic and curative.—*Med. News.*

## OINTMENT FOR PHTHISIS.

*L'Union Médicale* states that the following ointment is useful in the treatment of pulmonary phthisis:

- R. Creasote,  $2\frac{1}{2}$  drachms.  
Lanolin, } of each  $1\frac{1}{2}$  ounces.  
Olive oil, }  
Lard, }

This ointment is to be applied with friction each night to the thorax, and the absorption of the creasote from the skin will be of value to the patient.—*Med. News.*

## HOW SHALL WE CURE CROUP?

By E. F. Starr, M.D., Nacooche, Ga.

By this term I mean membranous croup, in contradistinction to the spasmodic form: and in what I shall say on this subject I shall not claim entire originality, but endeavor to bring forward and enforce upon the minds of practitioners some facts that if well observed and carried out will prove a source of utility and comfort to such as may have to treat this formidable disease. If I can present these facts and the method of treatment so as to make them as clear to the minds of those who read as they are to my own, and can enlist general belief in the statement, I shall have accomplished my object and shall have done a good work.

I will not discuss the question of the identity of membranous croup and diphtheria, or whether or not all cases of croup are diphtheritic in character. I do not believe they are, but be this as it may, I shall now use the same treatment in the main for both. During most of the past this disease has been an *opprobrium medicorum*, and that no one treatment is acknowledged and followed as effective and reliable is manifest in the fact that so many different and varying formulas are being successively and from time to time proposed. I am now glad to believe that this state of things need not be perpetuated. In former years I myself regarded an established case of croup as about equivalent to a death warrant, but now I would go about the treatment of a case, not too long delayed, with nearly as much confidence as I would a case of remitting fever with plenty of quinine in my possession.

The pathology and symptoms are too well known to require notice here, but in reference to the treatment let it first be stated what should not be done, for now I eschew almost entirely the practice I formerly most trusted, that is, the administration of emetics, especially that form of them composed of tartar emetic. Do not give them. Persistent emesis is distressing and prostrating to the child, and, except in very rare instances, is ineffectual and unsuccessful. Neither, as a general rule, or scarcely at all, should purgatives be administered in the beginning of the treatment with object of catharsis, for this would interfere with the proper administration and the desired action and effect of the main remedy, the remedy most to be relied on and persisted in.

The indication for the treatment, in my view of the case, is to so affect the blood and the diseased locality as, first, to arrest the continuance of the deposit in the larynx and trachea, and, second, to soften and dissolve or loosen that which has already been exuded, so that it may be expelled by an effort of coughing. Can this be done? My experience teaches me that it can. In past time some of the fathers were known to

proclaim that calomel was the sheet-anchor, and I have no doubt they sometime succeeded with it, but not often. How did they administer it? Usually in large doses, hence in purgative doses, and herein was the failure. It was too speedily expelled from the system. They did not, it seems, fully apprehend the philosophy of its effect, that is, of its curative effect. They desired its purgative effect, and it possessed in their eyes a sort of hidden magic. They gave it in purgative doses, but we may suppose in some cases it would remain long enough in the child's stomach to be absorbed and produce the necessary constitutional and salutary effect, and hence their occasional success, enough to make them believe it a useful remedy; but by want of proper manipulation, and by reason of other influences brought to bear against calomel fifty or sixty years ago by a set of arrant quacks and impostors (the Thompsonians), it fell into some little disrepute and failed to be graded into proper line and to be established as the remedy for membranous croup. In the hands of the profession it did not grow into the full stature of its inherent capacity, and it is safe to say it has not even done so yet. Let us hope this may not remain true indefinitely. How then shall we proceed to secure its curative effect, since calomel is the remedy?

In the first place, let it be remembered it is not to be given in purgative doses, for this would prevent its curative effect. It must be given in a way to secure its permeating and modifying effect upon the circulating fluids and the systemic condition; and to this end it should be given in small doses and frequently repeated. A child from one to three years old, after having a dose of two grains (or even three grains if there has been delay), should be given one grain every hour, promptly, persistently and without failure. If any of this one grain is wasted, let enough be added to make up for waste. If these doses incline to purge, add a little paregoric or a drop or two of laudanum to prevent. If a dose is thrown up or rejected, replace with another dose immediately. As auxiliary treatment I usually administer also a febrifuge like this:

R. Sweet nitre,  
Antim. wine,  
Syrup ipecac,  
Paregoric, aa q. s.

M.—From half to a teaspoonful two to four hours apart.

If there is much febrile excitement, I generally use two or three drops veratrum viride three or four hours apart to restrain the circulation, and in addition to these I use and advise a small blistering plaster over the larynx or upper windpipe. These latter measures are resorted to as precautionary, but the chief reliance is placed in the calomel.

During the first hours of this treatment the

symptoms may seem to march steadily on towards suffocation, but if properly administered and persisted in, the physician or friends will usually, in the course of twelve or fifteen hours, have the pleasure of observing a marked change for the better in the progress of the symptoms, the sound of the breathing will indicate a growing looseness in the obstruction, and after this, by an effort of the child—a smart struggle, it may be—the accumulation will be forced up into the mouth and may be wiped out, or perhaps may be swallowed, but in either case greatly to the relief of the patient. It is gratifying, aye, it is simply beautiful, to witness the effect of the treatment, the manner in which the obstruction is broken up, and the change from the condition of impending suffocation to that of comparative freedom of respiration. When this occurs calomel should be discontinued and some action of the bowels procured. There is but little danger of salivation, but it would be preferable to suffocation. I have not known it to occur.—*Atlanta Med. and Surg. Journal*.

### THE TREATMENT OF DIPHTHERIA.

Löffler recommends the following gargle in the treatment of diphtheria:—

R. Carbolic acid,	15 drops.
Alcohol,	2 ounces.
Distilled water,	5 “

This should be used as a gargle.

In other cases a solution of 1 to 2000 of corrosive sublimate can be used in the same manner, or the following antiseptic mixture, which is not poisonous, may be employed:

R. Thymol,	15 grains.
Alcohol,	3 ounces.
Water,	12 “

It is stated that the gargle of corrosive sublimate acts generally more favorably than does that containing carbolic acid.—*Med. News*.

### POWDERS FOR INDIGESTION.

*L'Union Médicale* states that Dujardin-Beaumont uses the following powder in the treatment of dyspepsia:

R. Subnitrate of bismuth,	} of each 2½
Carbonate of magnesium,	
Prepared chalk,	
Phosphate of sodium,	

This is to be divided into forty powders, and 1 powder taken after each meal.—*Med. News*.

Lice and other parasites are removed from the hair more quickly by a decoction of quassia, to which a little borax and glycerine have been added, than by almost any other known means. *Coll. and Clin. Record*.

### TREATMENT OF SEBORRHOEA OF THE SCALP.

Leibreich employs the following prescription in the treatment of seborrhoea of the scalp:

R.—Spirits of ether,	1½ ounces.
Tincture of benzoin,	1 drachm.
Vanillin,	½ grain.
Heliotropin,	3 grains.
Oil of geranium,	2 drops.

Mark “For external use, combustible.”—*Wiener medicinische Presse*.—*Med. News*.

### AN INJECTION FOR LEUCORRHOEA AND BLENNORRHOEA IN WOMEN.—(Lutaud.)

R—Creolin,	gtt. xxx
Ext. fluid hydr. canad.,	fl 3ijss.

Sig.—Two teaspoonfuls in a pint of warm water, to be used at one injection.

As urethral injection the following formula is used:

R—Ext. fluid hydrast. canad.,	gtt. xxx,
Creolin,	gtt. x,
Aquæ,	fl 3viij.

Sig.—Use pure as a urethral injection.—*Jour. de Med. de Paris*.—*Columbus Med. Jour*.

### INFLUENZA.

During the present epidemic of influenza I find, as an antipyretic and analgesic, nothing better than phenacetine or phenacetine and salol in combination. With very few exceptions, the temperature has been lowered and the pain greatly relieved after the administration of ten grains of phenacetine, or five grains of phenacetine and five of salol, followed by five grains of phenacetine, or two and a half grains each of salol and phenacetine every three hours. I usually give this for twenty-four hours, rarely finding it necessary after that time.—*C. Emmerring, in Med. News*.

### IPECACUANHA TO INCREASE LABOR PAINS.

Drapes (*Les Nouv. Remèd.*) affirms that ipecac, in the form of wine of ipecac, in the dose of ten to fifteen drops, repeated every ten minutes, constitutes a powerful remedy to provoke strong contractions of the uterus in a case of uterine inertia or rigidity of the cervix, which threatens to indefinitely prolong the labor. After the second or third dose strong uterine contractions will come on, will repeat themselves at regular intervals, and tend to rapidly bring the labor to an end. That which makes ipecac in this condition superior to ergot of rye is that it never provokes tetanic contraction of the uterus, so frequent after the administration of ergot.—*Med. News*.

## THE TREATMENT OF PULMONARY TUBERCULOSIS BY HYPODERMIC INJECTIONS OF IODOFORM.

Gavoy, in the *Gazette Médicale de Paris*, details his method of treating pulmonary tuberculosis with iodoform. Morning and night, a hypodermic injection of 30 minims of the solution, of 1 part to 100 of iodoform in oil of sweet almonds, is given.

No febrile reaction occurs, and the results are very good. The cough diminishes rapidly, and the characteristic muco-purulent catarrh first becomes more liquid and then ceases. The character of the voice is also improved, and the lung becomes more permeable to the air. Inspiration is increased in depth, and the râles become more moist. Other symptoms showing the favorable influence of this treatment are a decrease in the night-sweats and a renewal of the appetite. The therapeutic influence of iodoform over carious bone and pus-corpuscles seems to point to the fact that it exercises an analogous action upon tubercular processes accompanied by resolution and necrosis of the lung.—*Med. News.*

## TREATMENT OF ERYTHEMA OF THE EYELID.

Brocq, in the *Revue d'Ophthalmologie*, states that he employs the following ointment in the treatment of erythema and swelling of the eyelids:

R. Salicylic acid,	7 grains.
Lactic acid,	7 "
Resorcin,	10 "
Oxide of zinc,	30 "
Pure vaseline,	5 drachms.

Care should be taken that none of this ointment enters the eye.

In other cases the following ointment may be applied:

R. Salicylic acid,	15 grains.
Pyrogallic acid,	30 "
Vaseline,	15 drachms.

This treatment to be applied at night, and it may be alternated with that containing resorcin just given.—*L'Union Médicale*—*Med. News.*

## INJECTION FOR TUBERCULAR DIARRHŒA.

R. Olive oil,	6 drachms.
Guaiacol,	10 drops.
Water,	8 ounces.
1 yolk of an egg.	

This injection is recommended for cases of tubercular diarrhœa.—*Journal de Médecine de Paris*.—*Med. News.*

## GARGLE FOR ACUTE TONSILLITIS.

R. Ammoniated tincture of guaiac,	} of each 6 drachms.
Compound tincture of cinchona,	
Chlorate of potassium,	
Honey,	2 "
Powdered gum arabic a sufficient quantity.	6 "
Distilled water enough to make 4 ounces.	

From one-half to one teaspoonful of this should be used as a gargle in a little water every two or three hours.—*Journal de Médecine de Paris*.—*Med. News.*

## A GARGLE FOR THE RELIEF OF FŒTID BREATH.

The *Revue Générale de Clinique et de Thérapeutique* gives the following prescription for the relief of this condition:

R. Saccharine,	} of each 15 grains.
Salicylic acid,	
Bicarbonate of sodium,	
Alcohol,	1 ounce.
Essence of peppermint,	10 drops.

A teaspoonful of this is to be placed in a wine-glassful of hot water, and used as a gargle once or twice daily.—*Med. News.*

## PRESCRIPTION FOR RHACHITIS.

In the *Journal de Médecine de Paris* the following prescription is given for the treatment of rachitis:

R. Phosphorus,	1 grain.
Absolute alcohol,	5 drachms.
Spirits of peppermint,	30 drops.
Glycerin,	2 ounces.

Six drops of this mixture may be given in water three times a day, and after the lapse of one week another drop may be added.—*Med. News.*

## PARASITICIDE OINTMENT.

*L'Union Médicale* gives the following ointment for the removal of parasites:

R. Salicylic acid,	45 grains.
Borax,	15 "
Balsam of Peru,	30 "
Etherial essence of anise,	5 drops.
Essence of bergamot,	20 "
Vaseline,	6 drachms.

Make into an ointment and apply to the part affected.—*Med. News.*

**DISGUISE FOR COD LIVER OIL.**—A mixture of equal parts of cod liver oil and lime water is said to be nearly tasteless, but may be made more palatable by the addition of an aromatic syrup.—*Med. and Surg. Reporter.*

## PYOKTANIN.

Dr. O. Wanscher refers to Professor Stilling's paper, in which the latter called attention to the antiseptic properties of the aniline dyes and named them pyoktanin, from their pus-killing properties. Experiments with the aniline dyes are now justifiable, for Merck has produced a non-poisonous aniline which can be given in doses of 15 grains to dogs, with no result other than to stain their faeces blue.

Wanscher confirms Stilling's statements regarding the pus-destroying properties of pyoktanin, but he is not certain that the good result following its use in two cases each of iritis and of choroiditis are to be ascribed to the antiphlogistic power of the pyoktanin. On the other hand, Carl and Braunschweig have disputed its antiphlogistic power, and also claim that it caused severe pain, shooting into the brow and the temple, and that great irritation with croupous exudate occurred upon the ocular conjunctiva after its use. Wanscher thinks these statements unjustified. He has found in a one-per-cent. solution of blue pyoktanin (methyl violet) an agent which fulfils the desire expressed by Billroth for a stain which will find and destroy its own peculiar bacteria without injuring the tissues. The results of Carl and Braunschweig he attributes in part to improper use of the stain. The pyoktanin, to be effective, must seek out the bacteria in the tissues; hence, it must be dissolved, clear, and easily absorbed. The more granular it is the more difficult will absorption be. Moreover, the application must be so made that no danger is incurred of transferring any pyoktanin from one patient to another, which can easily happen if the same brush is used for several patients. Pyoktanin in a half-dried condition, destroys the bacteria of pus, but not those of croup and diphtheria. Possibly the semi-dried mass is irritating, just as powdered chlorate of potash acts as an escharotic, while a concentrated solution has no such action. Again, the pyoktanin must be employed repeatedly until the tissues are effectually stained. To this end ten or twenty drops at a sitting are often necessary, and they must be instilled every two or three hours, according to circumstances. Carl discards it as ineffective because he did not succeed in checking a serpiginous ulcer by using one drop a day.

For six weeks, Wanscher says, he instilled pyoktanin (blue and yellow) in nearly every case that applied. Fifty patients received upward of a thousand instillations. About twenty patients came daily to his clinic, instillations being employed generally four times a day; altogether there were three hundred instillations a day. He says in no case did he see irritation follow. None of his patients have complained of pain; and, on the other hand, he says he has undoubtedly rescued three eyes which would have been

lost through gonorrhœa, and two others have recovered from it with full vision. Braunschweig has treated seventy patients with pyoktanin in two months, but it was not employed in a case of gonorrhœa. Wanscher reports his four cases in detail.

Besides the cases of gonorrhœa, he has treated by instillation of a one-per-cent. solution of pyoktanin two cases of cataract operation, four nipectomies, one squint operation, one case of gonorrhœa of the lachrymal sac, two cases of specific choroiditis, one of simple iritis, two of suppurative conjunctivitis, superficial keratitis, etc. The result in these and in other eyes and surgical cases in private practice has confirmed his good opinion of pyoktanin, especially of the blue pyoktanin.

In his private practice he says he has cured a gonorrhœa of the lachrymal sac which had persisted a year under other methods of treatment, even including galvanic stimulation of the mucous membrane of the canal. He has also employed it in the dressing after operation of a case of osteitis and necrosis of the tibia which had lasted twenty-five years. The result was favorable, and no irritation was produced. A walking case of gonorrhœa, associated with great dysuria, was abated with a one-per-cent. solution of pyoktanin. The same result was obtained in a case of balanoposthitis. A good result was also obtained in a case of ingrowing nail and inflamed corn. After operation a bandage soaked in a one-per-cent. solution was applied. The wound healed in a few days, notwithstanding the fact that the patient continued to go about.

Wanscher finds yellow pyoktanin less active than the blue. The color disappears quickly when used upon the eye, but more slowly when used upon the skin. Alcohol quickly dissolves the fresh stain.

In conclusion, he speaks of a one-per-cent. solution of blue pyoktanin as one of the most valuable of our therapeutic remedies for use in purulent ophthalmia.—*Therapeutische Monatshufte.—Medical News.*

## A RELIABLE PURGATIVE ENEMA.

The following enema has proved so reliable and satisfactory in my hands, that I feel it is worthy of a brief note:

R. Sulphate of magnesia,	2 ounces.
Glycerin.,	2 "
Oil of turpentine,	$\frac{1}{2}$ ounce.
Water,	2 ounces.—M.

Label, "To be used as an enema."

To move the bowels after abdominal section or after plastic operations on the female pelvic organs, it has been in constant use for many months. When used alone it has moved the bowels, as a rule, promptly; and has been equally



effective when given as an adjuvant to some cathartic taken by the mouth.

Prior to the employment of this formula, I had used the simple enema of glycerin, and of glycerin and turpentine, which are distinctly inferior to the one above recommended.

The combined action of Epsom salts, turpentine, and glycerin is very effectual, not only in evacuating the rectum, but also in getting rid of flatus, the presence of which in the bowels is the cause of much of the pain present after abdominal section.

I have had the opportunity, upon two occasions, of testing the activity of this enema in cases of threatened obstruction of the bowels following operation. Other measures failing—including purgatives and large and small enemata—I have introduced a long, soft tube up the rectum, and given this enema into the descending colon, with the happiest results.

Now that the use of opium is banished from the after-treatment of cases of abdominal section, this enema has, in my hands, become the great anodyne—which fact is quickly realized by patients, who demand its frequent use.

When given through the rectal tube, its employment promises much in cases of partial obstruction of the bowels, and also in cases of obstruction due to paralysis of the bowel.

The enema is given best through a hard-rubber piston syringe.—*Charles P. Noble, M. D., in Med. News.*

#### ATROPINE FOR PARALYSIS AGITANS.

Moretti has treated three cases of paralysis agitans by hypodermic injections of atropine. The results obtained were very encouraging. He commenced the treatment by the injection of  $\frac{1}{100}$ th of a grain, and progressively increased the dose until  $\frac{1}{30}$ th of a grain was taken each day, divided into two injections.—*Med. News.*

#### ANTIPYRINE IN THE TREATMENT OF GONORRHOEA.

In the *Revue Générale de Clinique et de Thérapeutique* it is stated that Brindisi employs the following solution as an antiseptic lotion in the treatment of gonorrhoea:

R.	Antipyrine,	45 grains.
	Sulphate of zinc,	4 “
	Rose water,	} of each 2 ounces.
	Cherry-laurel water,	

Label, “To be used as an injection.”—*Med. News.*

Gunpowder stains of the face may be removed by painting with biniodide of ammonium and distilled water, equal parts; then with dilute hydrochloric acid, to reach the tissues more deeply affected.—*Coll. and Clin. Record.*

#### PRESCRIPTION FOR TETANUS.

*La Semaine Médicale* states that Mayer employs the following prescription in the treatment of tetanus:

R.	Hydrochlorate of morphine,	$\frac{1}{2}$ grain.
	Chloral,	15 grains.
	Bromide of sodium,	20 “

Make into one powder, which should be wrapped in waxed paper; give from three to six of these powders each day.—*Med. News.*

#### CHLOROFORM OINTMENT.

In a paper read at the recent meeting of German Physicists and Physicians, Mr. Kittl suggested that as such applications owe their efficacy to the slow evaporation of the chloroform, thicker media than the oil generally used should be employed, so as to prolong the action of the chloroform.

For three or four years he has made ointments according to the subjoined formula, and they have been used with good results by medical men.

Chloroform,	1 part (by weight).
Wax,	1 “ “ “
Lard,	2½ to 3 “ “ “

This is generally used for rheumatic affections. A harder salve is made with the same proportions of wax and chloroform, but with  $1\frac{1}{4}$ ,  $1\frac{1}{2}$  and 2 parts of lard. The way to make the ointment is to melt the lard and wax in a stoppered bottle, and when cold stir in the chloroform with a spatula. The ointment is applied to the affected part on lint.—*Coll. and Clin. Record.*

#### CHILBLAIN REMEDIES.—Liniment.

Camphor,	2 drachms.
Cantharides,	2 “
Table mustard,	4 “
Oil of cajuput,	1 “
Oil of rosemary,	3 “
Alkanet,	2 “
Oil of turpentine,	10 ounces.

Macerate for ten days with frequent agitation.

This liniment is to be applied to the skin by friction night and morning. It has the advantage over many liniments in being comparatively harmless, and it is at the same time efficacious.—*Chemist and Druggist.*

#### EARACHE DROPS.

Camphor-chloral,	5 minims.
Glycerin,	33 “
Almond oil,	20 “

Mix. Three drops of this mixture on absorbent cotton to be placed in the ear twice a day.—*Chemist and Druggist.*

## GLYCERIN JELLY.

A favorite preparation for winter use, being a soothing and healing application for the chapped skin. There are numerous formulas, but the following are among the best :

*Plain.*

Thin French gelatin,	$\frac{1}{2}$ ounce.
Water,	5 "
Glycerin of borax,	10 "
Triple rose water,	6 "

Soak the gelatin with the water all night in a gallipot, and next morning place the pot in a saucepan with water and heat until dissolved ; then add the glycerin and the rose water. Mix. May be colored with cochineal or a little saffron.

*Carbolated.*

Isinglass,	1 ounce.
Glycerin,	16 "
Water,	3 "
Carbolic acid,	1 drachm.

Prepare as above.

*Solid.*

French gelatin,	120 grains.
Glycerin,	$1\frac{1}{2}$ ounces.
Water,	$\frac{1}{2}$ "
Otto of rose,	1 drop.

Make in the usual way, adding the otto when the jelly is lukewarm, and pour into moulds, such as cosmetic cases. To be used in the same way as camphor ball, the skin being first moistened, or may be used before drying the hands after washing.—*Coll. and Clin. Record.*

## SWEET OIL IN THE TREATMENT OF HEPATIC COLIC.

There is no doubt that the administration of sweet oil does give relief in cases of hepatic colic. Acute attacks of pain should be relieved by opiates, and large doses of oil should be given as soon as quiet is obtained. In many, if not all cases, the pain fails to recur after the oil has acted on the bowels. The masses (like bits of cucumber pickle covered with mucus) which are passed in nearly all cases are not all gall-stones, but soap formed by the action of the bile and pancreatic juice upon the oil : yet while fragments of gall-stones are sometimes passed along with these green masses, and sometimes whole gall-stones are found in the stools. Sweet oil will not remove gall-stones from the gall-bladder or bile ducts ; it is not given until cessation of pain has shown that the stone has passed into the bowel. The presence of gall-stones in the bladder does not cause colic, nor does the passage of a small stone through the duct cause it necessarily. It is probable that the oil acts upon the duct and the adjacent bowel in such a way as to remove the conditions which are the immediate cause of the repeated attacks of hepatic colic.—*Coll. and Clin. Record.*

## LOCATION OF THE FISSURE OF ROLANDO.

C. L. Dana, of New York, gives a new method of determining the position of the fissure of Rolando. It is this : Find and mark the stephanion, *i. e.*, the point where the temporal ridge crosses the coronal suture ; find and mark the concave depression just above and behind the mastoid, and just below the asterion or junction of the lambdoid and temporo-parietal sutures ; draw a line between these points ; find the bregma, and draw a line from it to the posterior edge of the external auditory meatus. The point of crossing will be just over the lower end of the fissure of Rolando or within a centimetre ( $\frac{1}{2}$  inch) of it.—*Post Graduate.—Satellite.*

For gout, *St. Louis Med. and Surg. Journal*, quotes the following application :—

R Flexible collodion,	
Ether,	āā 5 parts.
Salicylic acid,	4 "
Muriate of morphine,	1 part. M.

Apply to the affected toe.—*Coll. and Clin. Record.*

The following collyrium is recommended by Tenlon (*Med. News*, Jan. 3d, 1891), in cases of granular conjunctivitis of a persistent type, with much photophobia ; one drop to be instilled into the eye morning and night :—

R Distilled water,	$\frac{1}{2}$ ounce.
Neutral sulphate of atropine,	$1\frac{1}{2}$ grains.

In the evening he introduces into the eye a very small piece of the following ointment :—

R Calomel, pure and thoroughly pulverized,	2 drachms.
Vaseline,	1 drachm.

He also finds it of service during the day to apply fomentations for as long periods as possible, consisting of the decoction of chamomile as hot as can be borne. At the same time it is well to administer internally cod liver oil, syrup of the iodide of iron, and general tonics.

An asthmatic neighbor of mine gets so much relief from inhaling the smoke of a teaspoonful of the following combination that he wants all other chronic asthmatics to know about it :

Stramonium leaves,	} āā	3 iv ;
Green tea dust,		
Lobelia,		

Mix together and wet up with a saturated solution of nitrate of potassium. Dry thoroughly and keep in a close can or well stoppered bottle.—*W. T. Plant, M. D., in Am. Practit.*

## TREATMENT OF CONVULSIONS IN CHILDREN.

In a paper published in the *La Médecine Moderne*, December 18, 1890, the author calls attention briefly to the usual advice of at once removing the clothes of the child affected with convulsions before giving it a warm mustard bath, with cold applications to the head. The seizure is very apt to come from the digestive tube, and thus production of vomiting by tickling the soft palate, or the administration of an emetic may be of service, or a full dose of calomel or of castor oil may be administered. It should also be remembered that perhaps an intestinal parasite may be the starting-point of the convulsion, and that a vermifuge may be indicated. When there is a cerebral hyperemia the application of leeches behind the ears may arrest the convulsion, or in very vigorous children bleeding may even be practiced with success. Mustard plasters may be perhaps of value applied to the lower extremities, or even the compression of the carotids, as recommended by Trousseau. Inhalations of chloroform may produce relief, but it will be usually only transient, and a repetition of its employment is not without danger. Bromide of potassium combined with chloral is especially reliable when the convulsions are obstinate,  $7\frac{1}{2}$  to 15 grains may be given to young children, 30 to 60 grains to children a little older, and 60 to 90 grains to children approaching adolescence. To new-born children the dose of chloral should be only  $\frac{3}{4}$  of a grain; to nursing infants 2 grains; 3 to 5 grains to children of two years of age, and 6 to 13 grains to children between seven and twelve years of age. When the convulsion has been subdued it would be well to continue the use of the bromides, prescribing bathing the head with cold water, general friction, lukewarm baths, and strict regulation of diet. With this may also be combined small doses of calomel and the valerianate and oxide of zinc.—*Therapeutic Gazette*.—*Am. Practit. and News*.

## HOW TO REMOVE SUTURES IN GYNÆCOLOGICAL AND OTHER OPERATIONS.

Dr. Howard Kelly lays great stress upon the minutest matters of detail in a paper entitled "Antisepsis and Asepsis Before and After Major Gynecological Operations." His directions in respect to the removal of sutures apply to all operations where they are used, although Dr. Kelly specially refers to abdominal sections. Care must be taken, he says, in their removal, not to convert this simple step into a source of irritation or infection of the wound. There is usually a little cake of encrusted lymph and powder at the point where the suture emerges from the skin. In removing the suture the loop

must not be cut above that point on one side of the wound; for if that mistake be made, when the suture is extracted by traction on the opposite side of the wound, the crust of lymph will be dragged through the whole track of the suture, including, in the case of an abdominal section, the peritoneum. The suture must be cut below the crust, where it is moist and pliable. The free ends of the suture should, in the first place, be caught by a dressing forceps so that the loop may be raised; then the loop is carefully clipped in the moist part, below its point of exit. Lastly, the suture is extracted by pulling it toward the side on which it has been cut. If traction be made in the opposite direction, the freshly-united surfaces may be dragged apart.—*American Journal Medical Sciences*.—*Satellite*.

## TREATMENT OF BED-SORES.

Billroth is stated to apply the following treatment for bed-sores: Upon the appearance of reddening of the skin he applies a lotion of vinegar or lemon juice. If excoriation is present, he applies nitrate of silver, and protects the part by zinc ointment or soap plasters. Where gangrene comes on, antiseptic compresses are to be applied, the wound being cleaned by the use of chlorine water, or carbolated oil may be used with care as the phenomena of intoxication may appear. Internally, he employs supportive treatment with wine, acids, quinine and musk.—*Med. News*.

## PRESCRIPTION FOR WHOOPING COUGH.

Von Genser is said to use the following prescription in the treatment of whooping cough:

R. Carbolic acid,	1½ grains.
Rectified spirit,	2 drops.
Tincture of iodine,	5 "
Tinct. of belladonna,	10 "
Peppermint water,	2 ounces.
Simple Syrup,	1 drachm.

To a child of two years a teaspoonful of this mixture may be given every two hours.—*Med. News*.

## ENDOMETRITIS.

Professor Parvin, in speaking of the treatment of endometritis, said the patient should be put to bed, given a saline purgative and antiseptic injections. This may abort an attack. Make use of warm baths; later, astringent injections. There is nothing better in this disease than the injection of a teaspoonful of creolin to a quart (litre) of boiling water or the application of Churchill's tincture of iodine.—*Times and Register*.

## SPECIAL HYPNOTICS.

By Philip Zenner, A. M., M. D., of Cincinnati, Ohio.

*Morphia* is most indicated when the sleeplessness is the result of pain, fear or anxiety, or other bodily or mental discomfort. It is one of the surest of the hypnotics, and its sleep comes nearest to the natural one in its refreshing effects. It is specially indicated in anæmic subjects, and is, on the other hand, to be used cautiously in congestive conditions, or where there is cardiac weakness. It is to be avoided in children.

*Chloral* is perhaps the most powerful of the sleep-producing remedies. On account of its weakening influences on the heart it should not be used for very long periods, and should be used cautiously in cases of weak heart. In small doses it is a very favorite hypnotic, and deservedly so. Usually it is given in combination with the bromides, which increases its usefulness. A mixture of morphia and chloral has an unusually sedative effect.

*Paraldehyde* is a less powerful hypnotic than the preceding, but does not subject the patient to the danger of habit, nor does it threaten the heart. Its taste, occasional disturbance of the stomach and irritating effects on the bronchial tubes, in cases of bronchitis, are its chief objections. Its usual dose is one drachm, but it may safely be given in four times that quantity.

*Amylene hydrate* is said to be about equal to paraldehyde as a sleeping medicine, and to have none of the objectionable qualities of the latter, just mentioned. It is given in all forms of insomnia, the dose varying from ten to one hundred grains.

*Urethan* is a mild and agreeable, but less certain hypnotic, and is not used very extensively.

*Sulphonal* has, perhaps, become the most popular of the recent hypnotics. The average dose necessary to promote sleep is from twenty to thirty grains. It is slower in producing its effects than other hypnotics, usually a few hours intervening before drowsiness is felt. This is because the medicine is very slowly absorbed from the stomach. This can be remedied to some extent by having the medicine finely pulverized and administered in a large quantity of hot fluid, bouillon, milk or the like. It will generally fail to promote sleep when the latter is prevented by pain. On the other hand, it is of special value when there is a great motor restlessness, in chorea, maniacal conditions and the like. In large doses, when long continued, it is likely to cause a sense of vertigo.

A still newer remedy, and likely to receive equal favor with sulphonal, is *chloralamid*. This is a combination of chloral and formamid, but is said not to have the ill effect of the former, especially not to affect the heart or disturb digestion. Like sulphonal, it usually acts slowly, one to one hour and a half usually passing

before sleep is produced. But it seems to have a somewhat more favorable influence than sulphonal in promoting sleep when pain is a disturbing element. The dose varies from fifteen to sixty grains. It is soluble in one and one-half parts of alcohol, or twenty parts of cold water. It should not be given in hot solutions, as it is decomposed by heat.

I will only mention one other hypnotic, *hydrobromate of hyoscyne*. This is of special value in motor restlessness and the like. It is most frequently used in cases of insanity, especially maniacal conditions. Ordinarily the dose mentioned is from  $\frac{1}{10}$  to  $\frac{1}{100}$  of a grain, but it is given in maniacal cases in much larger doses, even as much as one-tenth of a grain hypodermically.

Perhaps I should not close this paper without mentioning some simple suggestions often sufficient in lighter cases of insomnia, and important in all, such as sleeping in a cool room, seeing that the feet and extremities are not cold, having warm, but light covers, not eating heavy meals shortly before retiring (though a light repast is often an aid to sleep), darkening of room and removal of other possible external disturbances. If in addition to all this the patient retires with the determination and the belief that he will sleep (and the assurance of the physician is often of great aid in this particular), there is considerable prospect of his being successful.—*Col. and Clin. Record*.

## TREATMENT OF BRONCHITIS.

A young man, say from twenty to twenty-five years of age, comes under our notice with a feverish cold; his temperature reaches 101°F. to 103°F., with dry chest notes; we order him straight to bed in a temperature of 65° to 70°F., covered with blankets, and straightway inject  $\frac{1}{4}$  grain of nitrate of pilocarpine subcutaneously, encouraging the subsequent sweating with diaphoretics and warm drinks, to be mentioned later on; the mixture we prescribe is liq. ammoniac acet,  $\mathfrak{ss}$ , sp. eth. nit.  $\mathfrak{ss}$ , sweetened camphor water  $\mathfrak{ss}$ , and with each dose two minims of Fleming's tincture of aconite, to be taken every hour for the first three or four doses, subsequently every two hours, finishing up next day with two grain doses of quinine sulph. By this means, in the majority of cases, we avoid having to pay many visits and save his club many weeks of sick pay. In this case we do not reach the second or moist stage of the disease, the first being what we describe as the hot, dry stage.

But we do not always get at our cases in such an early stage; usually the first has passed off and the second stage is commencing. We still inject the pilocarpine and order the above mixture, but supplement the treatment now with steam from the bronchitis kettle, to which we

add twenty minims of the ol. menthae pip. for each pint of water in the kettle. This steaming should be continued for twenty or thirty minutes every two hours, or perhaps continuously for the first six hours, should the case be severe. With children in the same condition we use bicarbonate of soda in the proportion of  $\frac{5}{16}$ iv to the kettle of water, poultices of linseed to the back and chest and a mixture proportionate to age, and for our little sufferers we manage to make a very nice bell tent with the mother's umbrella.

When the acute symptoms have passed off we rub the chest and back with a liniment composed of ol. camph. (essential)  $\frac{5}{16}$ j, tinct. opii  $\frac{5}{16}$ ss, lin. saponis  $\frac{5}{16}$ ss, to be well rubbed in with the hand two or three times a day. Now the rationale of this treatment consists in causing the removal of carbon from the blood by the skin instead of the lungs, by inducing sweating, and it is wonderful how such minute doses of the tincture of aconite helps us to accomplish this. With children we also have the back and chest well swathed in wadding after the poulticing, but for adults this is not necessary. For these we are also convinced that no inhalant gives such a soothing effect as the oil of peppermint, but children do not bear it at all well. With adults also we find that if a stimulant is required we cannot find anything better than one-sixteenth of a grain of the hydrochlorate of cocaine in a pill freshly prepared, repeated in two hours if necessary. *In no stage of the disease do we consider alcohol necessary; in fact, we look upon it as harmful.*

After the temperature has come down to nearly normal we reduce the temperature of our patient's room to 60°F., gradually getting it to 55°F., and there we endeavor to keep it as long as necessary. The tonic we have found most benefit from is quinine with, in some cases, three minim doses of Fowler's solution. In poulticing children we have found it of benefit to cover the poultices with a piece of oiled silk. Saline aperients, should anything of the sort be needed, are indicated, and for children nothing is better than phosphate of soda, which may be given dissolved in beef tea. To sum up, the points in treatment we lay most stress upon are the subcutaneous injection of pilocarpine when the patient is comfortably recumbent in a temperature of 65° to 70°F.; the exhibition hourly of tinct. aconite (Fleming's) until temperature is lowered; the keeping up of sweating until the breathing is easier, and the exhibition of hydrochlorate of cocaine if a stimulant is required.—*Col. and Clin. Record.*

In Cholera Infantum give tea-spoonful doses of a half grain solution of nitrate of silver with a drop of tincture of opium, after having washed out the stomach. The silver may be repeated every hour, the opium as needed.

## AN EFFICIENT METHOD OF REMOVING FOREIGN BODIES FROM THE NOSE.

Dr. S. Johnson Taylor (*Lancet*, November 8, 1890), describes the following method of removing foreign bodies from the nose, which was successful in the case of a child of three years with a large bead in the nostril. The procedure is simply Politzer's method of inflation through the unobstructed nostril.

The nozzle of the Politzer bag is introduced into the nostril which does not contain the foreign body, and if the patient is old enough he is requested to swallow a mouthful of water. During the act of swallowing, the bag is vigorously compressed, the escape of air from around the nozzle being prevented by grasping the nose with the thumb and forefinger. At the moment of compressing the bag the foreign body will probably be blown out. In the case of a young infant the compression should be made while the child is crying.—*St. Louis Clinique.—Pittsburgh Med. Review.*

## BENEVOLENT SOCIETIES AND PHYSICIANS.

The imported custom of benevolent societies employing physicians to render medical attendance to all members at a nominal annual per capita fee, seems to be growing into an evil that threatens to reduce the income of physicians generally. Some associations appoint a physician for that purpose and pay him a reasonable compensation, others again pay only a small fee per capita. It is reported that a fraternal order having a number of lodges in Toledo, pay the physician of the lodge one dollar a year for each member. For this amount he must not only attend the member in every sickness, but also furnish the necessary drugs.

These offices are not always occupied by the young men in the profession, for physicians of fifteen and twenty years practice apply for and eagerly accept such positions.

Such customs, foreign to American institutions, should be condemned, and physicians willing to be benefitted by such means should be discountenanced. It does not seem that any one having any feeling of manhood would be willing to humiliate himself to become the tool, the slave of another man for such a paltry sum as one dollar, but it is true that physicians of considerable pretention and standing do accept these places, hoping thereby to be retained as the family attendant and consequently enlarge their income. Having once indulged in so degrading a practice, and having gained the confidence of the family the slave robs his master as was done in one instance at least. Being the dollar tool of a man, a physician is asked to prescribe for another member of the family, which he cheerfully does and extends the treat-

ment over a period of three months with charges to the tune of over four hundred dollars. The pluck of this physician is certainly to be admired, for after selling his manhood and independence for one dollar, he robs his kind master of four hundred.

Another outgrowth of foreign institutions and an evil that is on the increase, is the giving of free medical service to saloon and innkeepers so that they will be the agent of the physician. The physician and saloonkeeper being so dovetailed together that each becomes a steerer for the other. A noble profession and an ignoble occupation working hand in hand, can be for no other than selfish motives. A member of the most honorable profession playing second fiddle to the devil's emissary. The idea, that a physician is so degraded, so lost to self-respect, as to be guilty of such acts! It is not at all surprising that quackery will and does abound as long as men pretending for honors from the profession will prostitute themselves and the profession by deeds like these. These mawkish acts are deserving of notice, and the publicity given them by opposition, is only the duty of all honest men; the system is perverse of public morals, and a robbery of the profession; as such it must be combatted until it is abated.

#### WHAT IS A GOOD DOCTOR?

Under this heading the *Toledo Blade* published a number of interviews with regular and irregular physicians.

If any of the laity is asked, who is a good doctor? the family physician is usually held up as a model doctor, or the one being the happy possessor of an abundance of this world's good, whether inherited or acquired by marriage or by hard work and fortunate investments, is mentioned as a good doctor. While the public have their choice, they do not always select the one best qualified in every respect to minister to the diseased body.

In the following selections from different interviews as published in the *Blade* the character of different men may be read. One of the interviewed, among other things, said:

"The essentials of a good physician are knowledge, readiness, moral courage, gentleness and a good digestion.

These and twenty years of active professional ups and downs, and you have a good physician." In the main these summaries of the qualities of a good physician are true, for without knowledge and good health, no man is prepared to promptly relieve suffering. But to say no physician can be said to be a good one until he has been engaged in active practice for twenty years is a slur upon the many thousand young men doing yeoman service in behalf of mankind. Furthermore the old men and even men of twenty years

of professional life are frequently far behind the recent graduate in many of the qualifications mentioned in the interview.

Another physician, who had his say, spoiled an otherwise excellent description of the good physician by saying:

"A young man who is to succeed in the practice of the medicine to-day, must not only be industrious, talented and well indicated, but he must also possess the qualities that make the successful man of affairs, he must be alert to see and *profit by anything that can be turned to his own advantage, and not be too tender of the sensibilities or the interests of his competitors*; in other words, in the expressive language of the times he must be a "Hustler."

That a physician, and a regular at that, should give such wicked advice to a novice, is beyond our comprehension. To say that young physician must cease to be a gentleman, in that he shall turn every thing to his own advantage regardless of right and wrong, or the sensibilities and interests of others. To be a good doctor he should be an Ishmaelite with his hand against every other physician.

Such malicious advice does not tend to inspire respect for the profession, nor will it benefit the beginning physician, for if he starts his professional life with his hand raised against every one, every man's hand will be against him. It is to be hoped that no young man will see in this description, his ideal doctor, but rather in the following extract from another interview, which is marked contrast with the above:

"He ought to be, first of all, a *gentleman*; kind and considerate towards his patients, and *mindful of the rights of his professional brethren*."

This, with the necessary skill, love for work and for the practice of medicine, constitutes our beau ideal doctor; to this should be added another attribute as expressed in the views entertained by one of the interviewed:

"The good physician must be a good business man, if he desires to reap the just reward for labors performed. He should not be ashamed to send his bill for services and insist upon its liquidation as well as any merchant or banker."

#### FOR THE GRIPPE.

With the recurring prevalence of the so-called *grippe*, I beg leave to suggest the following as a specific for adults in such cases:

Salol,	℥ij;
Phenacetin,	℥ij;
Quinia salicylat,	℥j.

M., ft. cap. xx. Sig: Two every three hours.  
E. R. Palmer, M. D., in *Am. Practit.*

# THE CANADA MEDICAL RECORD,

PUBLISHED MONTHLY.

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## EDITORS:

A. LAPHORN SMITH, B.A., M.D., M.R.C.S., Eng., F.O.S., London  
F. WAYLAND CAMPBELL, M.A., M.D., L.R.C.P., London.

## ASSISTANT EDITOR

ROLLO CAMPBELL, C.M., M.D

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MONTREAL, AUGUST, 1891.

## THE 12TH INTERNATIONAL CONGRESS.

The arranging for the suitable reception of such a vast body of learned men as attends the holding of an International Congress requires a very long notice in advance. The eleventh Congress will be held in Florence, Italy, in 1893, and so far no place has been suggested for the meeting of 1896. Why not invite that Congress to meet in the great commercial metropolis of Canada? With lines of steamships running direct to Montreal from Great Britain and the north and south of Europe, no city in America is more suitably situated. It has the advantage that during August when these Congresses are held the heat is quite endurable, being less than at either Florence or Washington. The medical profession is largely represented at Ottawa, and no difficulty would be experienced in inducing the Federal Government to vote a grant of twenty thousand dollars to enable Canada to take a suitable position in the ranks of civilized countries and in the scientific world. As a business investment the stay of fifteen thousand doctors and doctors' wives, who would spend at least four dollars a day each in the city of Montreal would make it well worth the city's while to follow the example

of Berlin and vote ten thousand dollars. With a guarantee fund of thirty thousand dollars we would have no difficulty in inducing the Congress to accept our invitation. We would respectfully ask our editorial confreres to publish this article in all languages, so that at the Congress of Florence, which we hope to attend in person in order to extend this invitation, we may receive a favorable reception for our invitation. Montreal has a population of a quarter of a million, and is the seat of four universities, every facility is here offered for the holding of such a grand assembly, and of offering hospitality to such distinguished scientists. We think we can depend upon the hearty co-operation of the Canadian profession in our humble efforts to make our dear country better known.

## THE CANADA MEDICAL ASSOCIATION.

We desire to call the especial attention of our readers to the notice to be found in the advertising pages of this issue of the twenty-fourth annual meeting of the Canadian Medical Association to be held in Montreal on the 16th, 17th and 18th of September. A number of interesting papers have been promised, and we can safely promise our brethren from a distance a right hearty welcome. It is the duty of every Canadian to do all that lies within his power to foster the healthy national spirit which is everywhere in Canada becoming more evident. We must forget as soon as we can and as much as possible that we are New Brunswickers, Nova Scotians and Quebecers and realize that it only requires a patriotic and Canadian spirit to make of Canada one of the finest nations on earth. If the three or four thousand medical men of Canada would give the meetings of the national association the preference over all others they would do much towards converting the medical profession of Canada into what it should be, a great national institution.



## OBITUARY.

## RICHARD LEA MACDONNELL.

Rarely has the profession of Canada suffered a more serious loss than by the death of Dr. MacDonnell, of McGill University, which took place in Montreal on the 31st ult. In him were possibilities of which the past had given full earnest, and the deepest sadness is in the thought of a life of so much promise thus prematurely removed. Although only thirty-five years old, he had reached a position which gave scope to abilities of first-class order and afforded opportunities of impressing upon a large class of students those qualities of mind so essential in the teacher, so priceless to the taught—honesty, system and painstaking care.

Upon the death of Dr. Palmer Howard, three years ago, Dr. MacDonnell followed Dr. George Ross in the chair of clinical medicine, a position which his father had occupied in 1845. He had previously been elected on the staff of the Montreal General Hospital. The pages of the *Montreal Medical Journal* for the past twelve years attest the diligence with which he worked at his profession. Of late he has been a valued contributor to our columns, and only three weeks ago we published an admirable lecture of his—probably his last communication.

Four years ago Dr. MacDonnell had a severe attack of inflammation of the lungs, which was thought possibly to be tuberculous, but after a winter abroad he returned in excellent health. During the past session of the school he was vigorous and well, and accomplished a large amount of literary work. Two months ago he began to fail in health, and went earlier than usual to his summer residence on the lower St. Lawrence; but pulmonary symptoms developed with great rapidity, and he died a few days after his removal to Montreal.

Very few men have entered upon the race with greater advantages than Dr. MacDonnell did. To a fine physique and presence, and a charm of manner which is so often continued in this country in the second generation of Irishmen of the Brahmin class—to use an expression of Oliver Wendell Holmes's—there were added those mental gifts which alone assure success—industry and perseverance. Very early in his

career circumstances in connection with the accidental death of his father altered his surroundings and threw upon him responsibilities that were faithfully and courageously met, and that gave an unmistakable stamp to a character naturally refined and noble. Success came, cares lightened, and with domestic, social, and professional relations of the happiest possible kind, the future could not have looked brighter, but—*es hat nicht sollen sein*, and a devoted wife, an aged mother, and a loving sister, with colleagues, students and friends, mourn his untimely union with

“The inheritors of unfulfilled renown.”

—*N. Y. Med. Jour.*

## THOMAS ANDERSON RODGER.

In the death of Doctor Thomas Anderson Rodger, the profession of Canada has lost one of its members who had endeared himself to all with whom he had come into contact. The deceased was born in Scotland, and began his business life behind a pharmacist's counter. He was graduated at McGill in 1869, and was immediately afterwards appointed House Apothecary at the Montreal General Hospital. From the first he manifested those qualities of independence of thought and geniality of disposition which made him popular, both with the laity and the profession. To rise in a few years from the position of an apothecary's apprentice, to be a leading surgeon in our metropolitan city, the chief medical adviser of a great corporation, and the representative of the profession in the College of Physicians and Surgeons, without the favouring circumstances of family influence, or wealth, was alike creditable to his energy and self-reliance, and a testimony to his worth.

His official duties as chief surgeon to the Grand Trunk Railway Company of Canada, in succession to the late Dr. Scott, caused him to be widely known to the profession, and it can be safely said, that by his kindly bearing towards his professional brethren, his undoubted loyalty to the great corporation for which he acted, in no way diminished the high esteem in which he was held. He commenced practice in Point St. Charles, and became a busy man at once, afterwards he removed to the west end. His death was due to septic pneumonia, at the age of forty-four. He leaves a widow and one son. He had

been recently elected to the Montreal General Hospital.

It is a curious coincidence that the Grand Trunk Railway Company should lose its two chief medical officers, Dr. Rodger and Dr. MacDonnell, within a few days of one another.

## BOOK NOTICES.

**THE ORIGIN, PURPOSE AND DESTINY OF MAN, OR PHILOSOPHY OF THE THREE ETHERS.** By William Thornton. Boston, Mass., 1891.

The nature of this little volume of one hundred pages is fully set forth in its attractive title. It is a continuation of the work "Rationalism in Medicine" by the same author, issued in 1885. As is stated in the preface, the work is purely speculative, and consequently of relatively minor importance to the seeker after well established data for the foundation of his abstractions. The writer divides all things, organic and inorganic, into three ethers. The first he calls "life," the second the "Potentialities of heat, light, electricity and magnetism," and the third "a material nucleus which permits of the action of the other two ethers." The work is rather mystifying, too much so for most readers, but it will undoubtedly suit some characters, and to these we recommend it.

**DIABETES: ITS CAUSES, SYMPTOMS AND TREATMENT**

By Charles W. Purdy, M. D., Queen's University, Honorary Fellow of the Royal College of Physicians and Surgeons, Kingston; Member of the College of Physicians and Surgeons of Ontario; Author of "Bright's Disease and Allied Affections of the Kidneys," etc. With clinical illustrations. Philadelphia and London: F. A. Davis. Price, \$1.50.

This little monograph forms part 8 of the Physicians' and Students' Ready Reference Series. The author informs us that his object in presenting this volume is to furnish the physician and student with the present status of our knowledge on the subject of diabetes in such practical and concise form as shall best meet the requirements of practice, as they seem to him from a careful study and recorded observation of the disease extending over a period of twenty-one years. He has entered somewhat minutely upon the treatment, more especially in matters of diet, well knowing that a disregard of these details constituted the most frequent cause of failure in controlling the disease. The contents are divided as follows:—Section I. Historical, Geographical and Climatological Consi-

derations of Diabetes Mellitus. Section II. Physiological and Pathological Considerations of Diabetes Mellitus. Section III. Etiology of Diabetes Mellitus. Section IV. Morbid Anatomy of Diabetes Mellitus. Section V. Symptomatology of Diabetes Mellitus. Section VI. Treatment of Diabetes Mellitus. Section VII. Clinical Illustrations of Diabetes Mellitus. Section VIII. Diabetes Insipidus.

**PRACTICAL POINTS IN THE MANAGEMENT OF SOME OF THE DISEASES OF CHILDREN.** By I. N. Love, M. D., Professor of Diseases of Children, Clinical Medicine and Hygiene, Marion-Sims College of Medicine, St. Louis, Mo.; President Pediatric Section of American Medical Association, 1890.

This little book forms one of the Physician's Leisure Library Series and deals with a subject the importance of which cannot be over estimated. It will be especially acceptable at this season of the year, when the younger portion of a city's population is suffering from effects of bad food and improper hygienic surroundings accompanied by the pre-eminent evil of excessive heat.

## PERSONAL.

R. E. McKeichine (McGill, 1890,) has removed to Vancouver B. C.

We understand that there are three vacancies shortly to be filled at the Montreal Dispensary.

Dr. Stewart has been elected in-door physician at the Montreal General Hospital in succession to the late Dr. MacDonnell.

Dr. J. A. Hutchison and Dr. F. G. Finley have been appointed to the out-door staff of the same institution, succeeding Drs. Stewart and Rodger.

Dr. Wm. B. Dewees of Salina, Kas., advocates as a most successful treatment in gonorrhoea:

R. Sodii biberatis.

Resorcin,	aa ʒss.
Glycerin,	℥ ʒiijss.
Aque rose,	℥ ʒviij. M.

Sig. Use an olive pointed hard rubber syringe, and inject about two drachms every two hours the first day: afterwards lengthen the interval as the discharge lessens. After the third day, tincture of cannabis indica in five drop doses every three hours. Expose the glans penis and bathe in as hot water as can be borne, thrice daily. Good nutritious diet, and attention to bowels, avoiding undue exposure as to taking cold and abstain from sexual congress. Thus managed, few cases will remain uncured after eight days' treatment.—*Kansas Med. Jour.*

# The Canada Medical Record

VOL. XIX.

MONTREAL, SEPTEMBER, 1891.

No. 12

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## Original Communications.

### PHLEGMASIA ALBA DOLENS: ITS PATHOLOGY AND TREATMENT BY MEANS OF COLD WATER COMPRESSES AND ICE BAGS.

By John A. Miller, M.D., San Francisco.

This disease presents a complexity of symptoms, which are characterized by fever, inflammation, a whitish œdematous swelling and violent excruciating pains. The above phase mirrors the physical aspect of the disease in a majority of instances in an admirable manner, and for that reason will be continued to be employed by obstetrical writers, however much they may differ in their views respecting the pathological processes, which are concerned in its progress and development.

I will not occupy the reader's time with a historical review, for it would not subserve a practical purpose, inasmuch as an intelligent and rational understanding of this subject was not reached, until it had been observed that a similar train of symptoms occurred also in the male. This was found in connection with suppurative processes and inflammatory conditions, like cancer, erysipelas, consumption, certain phases of typhoid, etc.

When in the course of time it was thus demonstrated that, irrespective of sex, a phlegmasia was developed, which corresponded in symptoms and clinical history to the puerperal phlegmon, the premises from which to draw conclusions became materialized, and were no longer a creation of the speculative thought of the inquirer.

In our own country there is as yet no uniformity of opinion as to the pathology of the affection; some incline to the doctrine of a phlebitis, others side with the theory of embolism, and others, again, will not content themselves with a single process, but claim that there is an inflammation, more or less, of all the tissues. From my own observation and work in pathological investigations I am convinced that researches of this nature require careful analysis, before one can conclude which particular anatomical lesion constitutes the sole factor of a disease, or that one special organ or structure is the seat of the abnormal process.

In a *post mortem* dissection we find the ravages of disease in extenso, but this is not always a safe guide or ground upon which to base a conclusion, for when a diseased process has accomplished death of the subject, it is absolutely necessary to review and retrace the diseased process in order to establish the true pathology of the

disease under investigation. This is too often omitted. A subject dead of phlegmasia alba dolens will, in one instance, present a suppurating thrombus in the crural or femoral veins: a second subject will not present a thrombus, but a metritis with an accompanying purulent uterine phlebitis, and a third will simply show a purulent infiltration of the cellular tissues of the pelvis and thighs, and evidence of metastatic suppuration in the liver or kidneys, with or without either a phlebitis or metritis.

To what conclusion must we inevitably arrive in the presence of these apparently different anatomical aspects? There is only one, and that is, that phlegmasia alba dolens is essentially an inflammation due to septic infection of the pelvic cellular tissues as a starting point, but involving other structures in its progress: the veins and nerves.

Puerperal infection, whether carried from without on the examiner's finger, or by means of contaminated clothes, or implements such as a catheter or a syringe tube, to the genital tract of the parturient female, or on the other hand, due to uncleanness of person, accumulated filthy secretion in the vagina, is liable to execute a progressive inflammatory action, the course and termination of which it is impossible to foretell.

That practitioner who expects to find always the same symptoms in order to make a correct diagnosis of puerperal infection, who has, as it were, a fixed picture in his mind what puerperal fever and its kindred complaints should be, in order to agree with the text-books, will, I am sure, too often fail to recognize the disease in time to employ the necessary measures to prevent the full development of systematic toxæmia or death. The infection will always be controlled by the constitutional habit of the patient and her power to resist or eliminate the poison, rather than by a difference in the toxicological nature of the infection itself. The first symptoms of any of the different dis-

eases of puerperal infection will thus be greatly modified by constitutional habit, and the symptoms will not always correspond in severity to the amount or degree of the infection nor to the virulency of the infecting germs. We have a daily opportunity to see this illustrated in vaccinating different individuals with the same virus. One person, owing to a peculiar habit which we are unable to explain, will have an extensive phlegmonous inflammation, while another, vaccinated with the same virus, will only show the small typical vaccine pustule. This clearly shows the role of idiosyncrasy or constitutional habit in modifying the clinical histories of the disease. It follows that puerperal infection in one woman will eventuate into deep and complicated cellular tissue inflammation, while another will suffer only from a mild endometritis. To enumerate the different diseases or pathological processes which primarily or secondarily are the result of septic infection, would be to designate the different organs or tissues which become successively involved. The matrix of infection may begin from an abrasion at the vaginal mucous surface; a lacerated perineum or cervix, or it may be in the uterine canal and through the lymphatics and veins, conveyed to the areolar tissue. The inflammation that is thus established travels along the cellular tissue in which the large vessels and nerves that escape from the pelvis are imbedded; through the femoral or crural ring, it either accompanies the course of the vessels and nerves or makes it way through the saphenous opening to the subcutaneous cellular tissue of the thigh.

With the exception of the peritoneum, lymphatics and uterine veins, the other organs and tissues may separately and alone become the seat of septic inflammation. This strict conservatism which confines disease to one organ or tissue is the exception to the rule, for the tendency of the inflammatory process is to spread, and this is always on the line of least resistance, which

is the loose areolar tissue; this forms the highway of dissemination much oftener than the veins or lymphatics. This is particularly true of phlegmasia alba dolens, and to appreciate fully the pathology we must take in the entire field of pathological invasion.

The starting point or nidus of this affection corresponds with the organ or tissue primarily affected, and this I wish to emphasize, for it will be the means of clearing up the vast amount of speculative literature on this subject, and reconcile the different anatomical reports which have been recorded in good faith by a host of honest investigators. In the great majority of cases of phlegmasia dolens the nidus cannot be detected, but a cellulitis in the pelvic realm, partial or circumscribed, can always be detected; this is either perivaginal or peri-uterine, and then branching out along the course of the vessels and between the folds of the broad ligament towards the latter aspect of the pelvis.

The course of the pathological process is manifestly different in these instances, where the disease originates from cellulitis, than when it is traced to an endometritis, a metritis, or a uterine phlebitis. Early in the disease there is a rise of temperature ushered in by a pronounced chill. The most prominent symptom is pain referable to the iliac region running down the thigh along the course of the great vessels and nerves, sometimes increasing in the popliteal space, and then again being felt more in the calf of the affected limb; this is due to pressure on the nerves from the inflammatory induration in the areolar tissue, and an irritation of the neurolemma. The veins are as yet not compromised, hence in the early stages of the disease there is no cedematous infiltration, but an unusual hardness can be distinctly felt along the course of the large veins, and sometimes a redness which is due to the inflammatory process in the cellular tissue around the trunks of the large vessels and nerves. In patients where the disease runs a short

abortive course, the swelling or oedema of the limb will show itself after all acute symptoms have subsided, perhaps a week or two after apparent recovery; this is due to cicatrization of the inflammatory products around the veins, which comprises the lumen and interferes with the flow of blood within them. In a large proportion of cases, the inflammation continues and increases in extent, the subcutaneous cellular tissue may become first involved, but sooner or later the inflammation may spread between all the muscles of the leg; a periphlebitis is also added to the process—by this I mean an inflammation of the connective tissue around or about the vein including the sheath of the vessels. These structures are frequently inflamed without the walls of the vein being in the least affected; this, however, does not apply to the smaller veins which are entirely composed of connective tissue and epithelium and are much sooner complicated.

The oedema of the limb at this stage develops gradually, although sometimes quite suddenly; the smaller veins now become either compressed from inflammatory exudation, or participate in the inflammation, which coagulates the blood in them; it is the function of the intima to preserve the fluidity of the fibrin, but as soon as the internal coat of the vessel becomes altered by inflammation this physiological property is destroyed and the clotting of the blood (thrombosis) will occur; it is only necessary for the inflammation to continue unchecked for the larger veins to become similarly diseased with results much more dangerous and far-reaching.

It becomes absolutely necessary to locate at the earliest opportunity the starting point of the infection as between the uterine cavity or the vaginal canal, for this will give us positive information as to the *modus operandi* of local disinfection; in other words, whether the irritation shall be uterine or vaginal or neither. The steps to assure the differentiation must be divided into two separate stages for the obvious

reason that the uterine cavity cannot, at least should not, be explored until the vagina has previously been thoroughly cleansed. The first thing then to do is to wash out the vagina with a one to two thousand corrosive sublimate or a two per cent. carbolic acid solution. After this preliminary is accomplished, one is prepared, to differentiate between vagina and uterus, and in the following simple manner; take a clean new No. 7 or 8 gum bougie and introduce into the uterine cavity, turn it about the cavity, then withdraw. If there be no putrid smell, and the secretion adherent to the bougie smells normal or healthy, then it is quite safe to infer that there is no infection from that source; should it be otherwise, a thorough irrigation of the uterine cavity will become necessary, say three times in the twenty-four hours, and every time sufficient fluid must be used till the rinsings become clear and perfectly odorless. Should the operator decide to use corrosive sublimate, which is the best, he should always follow the sublimate irrigation with simply pure warm water, previously boiled; this will displace and wash out the sublimate solution that might be retained and so prevent absorption of mercuric chloride and mercurial poisoning. In the absence of evidence pointing to the uterine cavity it becomes simply necessary to douche the vagina with either of the above solutions, as often as may be necessary to keep the parts disinfected and cleansed.

Physicians who have had even a limited experience in the treatment of this complicated affection, will agree with me how awfully disappointing the usually employed remedies are in affording relief from pain, not to say, how utterly ineffectual the known treatment has proved itself in aborting or abridging the disease, by this I mean, to keep under control the inflammatory process, and to prevent those structures which are inflamed from eventuating into suppuration and abscess.

We will of course all agree, on the importance of a nutritious and easily digested

diet as an important factor in furnishing vitality towards assisting the elimination of toxic elements and fortifying the system against their depressing influence; alcoholic stimulants are very beneficial, and it is a good plan to give the food at regular intervals of four hours, for the simple reason that in the great majority of cases alimentation, thus administered, agrees with the physiology of digestion, and the interval affords an opportunity for the administration of such medicines as may be deemed useful.

Quinine in capsules, two or three grains at one dose, will always be of benefit if the digestion is not compromised by its use. Morphine to relieve pain, occasionally administered, may be indicated, especially at night, when the patient is very restless. I have administered morphine in quarter of grain doses every four hours, when it only stupified the patient for the time being, but as far as any curative effect was concerned, that was absolutely *nil*, nor did it relieve the pain.

Rubefacients of tinctures of belladonna, aconite, opium and capsicum had no effect in subduing pain. I also resorted to turpentine, and chloroform; these expedients seemed to be of doubtful utility, and the irritants on the contrary made the patient feel much worse, that is, the limb became more painful. Who has not been at a loss what to do, when all these measures failed? Hot fomentations of the different anodyne decoctions were alike disappointing; I was convinced to believe that they actually do harm by encouraging suppuration in the cellular tissue, which is certainly a very undesirable result and should be prevented, when in our power to do so.

If we take into consideration the great progress which pharmaceutical chemistry has made within the last few years, the many new remedies which science and art have invented, one feels diffident to assert that, among all these, the physician, at an hour and moment when he needs a remedy, most all these productions fail to accomplish

the desired object and we must needs turn aside in search for some other remedy. It is no longer an open question that these innumerable remedies confuse the minds of a majority of the practitioners, and that if the profession had fewer resources, whose therapeutic value it thoroughly understood, medicine would approach nearer an exact science than it does.

The therapeutic value of cold water affusions or compresses in subduing inflammatory diseases has been recognized in all ages. In one age it became the panacea of its votaries for all ills to which flesh was heir; in another it passed into unmerited oblivion. It became the sole expedient of the itinerant quack salver and received either the endorsement of medical savant or their obloquy. It is not within the scope of this article to give a history of these vicissitudes.

I have found in cold water compresses and rubber ice bags a most effectual remedy for the relief and control of this distressing and painful malady. My experience goes back to the year 1886, when my first trial of this invaluable expedient was made; since then, I had six cases, in which I demonstrated beyond a doubt, the utility of cold in relieving and checking the inflammatory process.

My first case became infected from the nozzle of a vaginal syringe, which the nurse had employed in a crude manner. A pelvic cellulitis on the left side was the beginning or first evidence of anything wrong; in the course of a few days, the corresponding limb first became painful and afterwards cedematous. That I exhausted all the resources that were laid down in the books at my command, is to put it mild, for the pain in the limb was so excruciating, especially in the calf of the leg and in the inner aspect of the thigh from the groin to the knee, that notwithstanding large and repeated doses of morphine, rubefacients and hot fomentations, the patient got little or no relief. I had treated pelvic cellulitis and perimetritis satisfactorily by means of

ice bags and cold water compresses, and there was every reason that a similar application to the painful regions of the affected limb would result in palliation, if not hasten the cure. This was under protest from the patient, because she dreaded the shock and feared bad consequences. I, however, insisted, and carried out my intentions. The procedure was in the following manner: an ordinary large towel was dipped into iced water, wrung out and clapped around the affected limb; a heavy flannel roller bandage was then applied from the toes upward to the groin. Flannel is preferable, because it does not get hard when moist, and remains softer under similar conditions than cotton material. On the most painful parts, like the inner aspect of the thigh, the popliteal region and the calf of the leg, I laid rubber bags filled with ice. These were kept in place by a circular binder, independent and outside of the roller bandage.

The patient was a little shocked when the cold towel was first applied, but the unpleasantness was only momentary, and then the reaction brought ease and comfort. She desired the ice bags to be removed quite often at first, as she claimed they relieved the pain, as anything else had never done before. The morphine was at once discontinued. The pain was entirely controlled by the cold. The temperature dropped from 103° to 100° the next day, and the patient commenced to improve, which continued uninterruptedly. The towel was freshly dipped from four to six times in the twenty-four hours. As soon as the patient experienced relief, she was quite anxious to endure the temporary chill from a fresh compress, because the limb felt always better for it afterwards: as the towel soon became dry and hot, and this gave rise to painful symptoms again. Since this first gratifying experiment I confidently and unhesitatingly employed the identical local measures, and the success was uniform and decided.—*Pacific Med. Jour.*



## Progress of Science.

### FRACTURES AND DISLOCATIONS IN COUNTRY PRACTICE.\*

By P. Daugherty, M. D., Junction City, Kansas.

The surgeon not only wants a steady hand, but a clean hand. He not only needs a clear head, but finger nails clear of dirt. The good surgeon must be a good anatomist. The mistakes of the surgeon are much more easily discovered by the laity, than the mistakes of the physician. The physician may stuff drugs, that he knows little of, into an organism that he knows less of, and the patient may recover, and the doctor get the credit of curing him; or, if he dies, the community will attribute his death to the disease. In a new and sparsely settled country like ours we cannot make a specialty of surgery. We have to be physician, surgeon and obstetrician, and out of all we do not much more than make a living. It behooves us to study that class of surgical cases closest, that we are oftentimes called upon to treat. Observation and experience teaches me that fractures and dislocations largely comprise this class. The splints and appliances for fractures recommended in works of surgery are legion. But who wants to haul a car load of splints around the country with him, even if he has the money to buy them. What we want is something cheap and efficient, and something of this kind can be found in every household.

Suppose you have a fracture of the leg, and you are ten miles in the country without splints, and no boards to make any. This was my condition on a certain occasion. What I did was this: I asked the lady of the house to make me a pint of starch, just as she made to starch clothes, to give me an old sheet and a paper box. From the sheet I made bandages, and from the paper box I cut me two splints long enough to reach from near the knee to about two inches below the sole of the foot, made tapering so as to correspond with the taper of the leg, and wide enough to cover the limb, with the exception of about three-fourths of an inch behind and in front. These splints I reinforced by two other much narrower. I placed my splints in the warm starch until they were soft and pliable. I then ran a bandage on the leg, adjusting the fracture at the same time, and applied my paste board splints to either side of the leg, moulding them to fit all the inequalities of the limb and lapping the ends upon each other in the hollow of the foot. Then I ran a bandage over the whole using the starch on every turn of the bandage, and placed the limb in proper position till it was dry. I found when dry that I had

the lightest and best fitting dressing that I had ever seen, and one that was firm and solid. I have never used anything else as a dressing since, in fractures of the leg, and that was twenty-five years ago. Starch, paper boxes and muslin you will find in every household.

The first bandage I have long since discontinued, and in its stead I wrap the leg in cotton batting. If the limb swells and your dressing gets too tight split it down in front and let it gap and run a bandage over it; if it gets too loose split it in the same way and lap the edges, running a bandage in the same way. This dressing I also use in fractures of the humerus, and have used it with good results in fractures of the femur in children.

In fractures of the clavicle, which are very common, we have a number of dressings recommended in works on surgery. For the past three years I have discarded all dressings I had been using prior to that time for Prof. Moore's, of Rochester, New York. I first saw it applied by Prof. Gunn in the Presbyterian Hospital at Chicago. I have had better results from this dressing than any other I have ever used. I use a strip of muslin eight or ten inches wide and about three yards long. All that you need to remember in order to apply this bandage correctly, is the figure of 8, embracing the elbow of the injured side and the opposite shoulder. They did not get the cut exactly correct which you will readily discover by looking at it. In all fractures of the femur where the bones can be properly adjusted with the limb extended I proceed to dress as follows: I take an ordinary lounge and make a solid board bottom for my mattress, placing my patient upon the mattress. If I have no pulley with me, and I do not often have, I improvise one by getting an empty spool, running a piece of fence iron through it and fastening the ends of the wire to the post at the foot of the lounge. I then take two long strips of adhesive plaster (male skin preferred) wide enough to reach one third the way around the leg, and long enough to reach from near the fracture to a few inches below the foot. After washing and shaving the limb, I carefully apply them to the sides of the limb sewing the ends together below the foot; in the loop thus made I tie a small cord bringing it over my spool and hang a weight to it sufficiently heavy to bring the limb to its proper length. I make my counter extension by elevating the foot of the lounge. For adults, as a rule, your extension weight should be eighteen pounds, for children, one pound for each year. The dressing is completed by filling two long bags with sand and placing one on each side of the limb to steady it. This dressing I have used for the past two years in every case of fracture of the femur under my care with good results. Colles's fracture is another that we often meet with. I have tried nearly every plan of treatment recommended in

\*Read before the Golden Belt District Medical Society.

the text books for this fracture, and my success has been anything but satisfactory to me, until three years ago I abandoned all for Prof. Pilcher's dressing as modified by Prof. Gunn. We apply this as follows: Make two compresses about the size of your little finger out of strips of muslin two and one half inches in width, and after reducing your fracture place one along the inner aspect of the ulna reaching down to the carpus, and the other exactly parallel with this along the outer border of the radius over its styloid process, holding these firmly, secure them by a turn or two of adhesive plaster around the wrist, of the same width as your compresses. Then place the arm in a sling made of narrow muslin, the bearing being on the inner portion of ulna over its styloid process. Keep the thumb looking up and let the hand drop unsupported, which acts as an extending force. In a few hours the hand will probably begin to swell and become numb from interference with the circulation; if so, split your plaster on the back of the wrist and it will give sufficiently to relieve the congestion. This dressing I never remove until the union is complete.

In dislocations, that of the shoulder joint is the one we are most frequently called upon to reduce. One of the first questions the surgeon should ask himself when called upon to reduce a dislocation is, "what was the position of the limb at the moment of the accident, what portion of the capsular ligament is torn and what is the condition of the untorn portion?" Take for example a subglenoid dislocation of the shoulder; it matters not whether force producing it be applied directly to the joint from above downward, or directly to the hand, fore arm or elbow with humerus raised to an angle of ninety degrees to the axis of the body, the result in either case is the same. The capsular ligament is torn along its under side, and the untorn portion is put upon the stretch holding the head of the humerus firmly beneath the glenoid cavity. The conditions are precisely the same in dislocations of the hip joint. With these facts before us how should we proceed to reduce the dislocation? Place the limb in the position it was at the instant when the dislocation occurred, carry it a little farther in the same direction until the untorn portion of the capsular ligament is completely relaxed, lift the head of the bone into place bringing the limb down parallel with the body. If you have never tried this plan you will be surprised to see what little force is required. For years I was in the habit of placing my patient upon his back, sitting down by his side upon the floor, placing my foot in the axilla, grasping his wrist with both hands and pulling the bone into place by main strength and awkwardness. This barbarous and unscientific method I have completely abandoned.—*Port Wayne Jour. of Med. Sciences.*

## ANKLE SPRAINS.

By A. J. Steele, M. D., St. Louis

At the St. Joseph meeting of this Association, held four years ago, in a report on Orthopedics. I stated that the treatment of sprains by massage seemed to shorten the period of recovery by one-half or one-third of the time required by the old stereotyped methods. I can now reaffirm the statement then made, but with the additional suggestion that hot baths and equable support and pressure will be found valuable adjuvants to the massage.

Old cases of sprains, lately fallen under my observation and come to my notice, in which the ankles were stiff, painless and worse than useless, and some, where amputation of the foot had been done, prompted the conviction that early proper treatment had not been adopted, otherwise such lamentable results would not have been had.

Immediate immobilization with gypsum, a plan of treatment quite general, certainly in my section, does not meet the indications, and is responsible for not a few tardy recoveries and bad endings. There cannot be found a more enthusiastic advocate of immobilization in joint inflammation than myself, but (and the statement may astonish some of you) in sprains we do not necessarily have joint inflammation, unless afterwards produced by the fool-hardiness of the patient or malpractice of the surgeon. A sprain is a subcutaneous injury in, ordinarily a healthy subject. Two conditions conducive to a most happy result. 'Tis true there is overstretching and even tearing of ligaments, contusion of articular cartilages, strained tendons, bruised nerves, ruptured blood-vessels and extravasation of blood and serum into the surrounding soft parts. Yet from all this there need be no fear of injurious inflammation or untoward results unless from neglect of the patient or improper treatment of the surgeon. Of course, here, as everywhere, scrofulous or impaired constitution is more likely to be followed by tedious recovery or permanent marring, but these cases are exceptionally rare. I have observed too, in subjects of a rheumatic tendency, a proneness to slow recovery.

If in our practice we have had unfortunate results in the treatment of sprains, consolation comes to us from a whilom Nestor of surgery, Gross, who says on this topic: "Convalescence will be tedious and may remain weak and tender for many months, if not for several years."

\* \* \* Sometimes, even, when every possible precaution has been adopted it will be found that the articulation continues to be weak and uncomfortable for a long time, the seat of neuralgic pains subject to severe exacerbations whenever exercise is attempted or there is a change in the weather. Occasionally the movements of the joint are never regained."

A gloomy picture, indeed! Certainly there are different degrees of sprain, and the very mild may recover promptly by the employment of simple means. Dr. Gross doubtless had reference to the severe forms treated by the methods then in vogue—leeches, fomentations, etc. I well remember this accenting the lead and opium lotion. Since his day quite a revolution has occurred in the treatment of sprains. Martin, of Boston, brought forward the rubber bandage applied to the foot and ankle to prevent effusion, hasten absorption, support the parts, and to partially immobilize. In some cases I have had fair results by the employment of the elastic roller. Again, there was the introduction of the immovable apparatus, usually of plaster of Paris, whereby continued rest to the joint was enforced. The application of continuous cold, with the idea of subduing and preventing inflammation had advocates. Bardin treated five hundred cases of sprain by means of cold water, with an average period of recovery amounting to twenty-eight and one-half days. Others went to the opposite extreme, immersing the parts frequently in hot water. Methodical rubbing with passive motions, massage with equally active use of the joint, found enthusiastic advocates; and lastly, electricity, with its occult potency, was evoked. All these methods singly have been employed, and all contain elements of therapeutic value.

But why be exclusive? May not a combination of the best of these means afford a rational treatment that will shorten the time of some of the simple cases and prevent untoward results in the more severe? I believe so, and my conviction is founded on the pathological conditions present, and upon experience.

As previously suggested, a sprain is a subcutaneous injury, which, as Hunter long ago demonstrated, is little liable to inflame, even though the parts rapidly swell from blood congestion, blood extravasation and from exudation of fluid from the dilated vessels. It is true if this condition of enlarged vessels and stagnated blood and unabsorbed exudate is prolonged, then the first step in the inflammatory process is inaugurated; and if this state continues, then the coagulable lymph contained in the serum increases and may harden and cause adhesions, or early, while still fluid, it may be reabsorbed, the sooner the better for a favorable termination. Stimulation of the parts by heat and rubbing will hasten such absorption, increase the circulation and overcome the blood stasis. If from neglect or improper treatment adhesions have occurred, then free motions are necessary to break them up; earlier movements would have prevented their formation.

When a voluntary strain or force is applied to a joint, the act is regulated and controlled by the power of the muscles and tendons, but often during the occurrence of a sprain the muscles

are taken off guard, surprised, and the force of the wrench or twist falls directly on the ligaments, which unequal to the task, strain and rupture, from the powerful leverage of the weight of the body.

It is remarkable, at times, what a slight force will produce this injury. Recently, an old lady on arising from her chair, at the sound of the dinner bell, stepped on the side of her foot and caused a severe sprain, tedious in its recovery. I have observed that sprains in the old are slower in their repair than in the young.

In the majority of cases the foot is turned inward, thus rupturing fibers of the external lateral ligament of the ankle joint. Rarely is it turned out. Or the foot may be caught between two opposing forces in such way as to unduly twist or bind the tarsus, as occurred in my practice recently in a young lad.

In consideration of this subject, we necessarily exclude bruises and contusions of the joint, occurring from direct application of mechanical violence, as in a fall from a height, lighting on the feet. Such injuries producing dislocation or fracture would be thrown out. We suspect such cases were included when Bardin made the remarkable statement before the Academy of Sciences, that of seventy-eight amputations of the leg and foot sixty had sprains for their origin. Either the injuries were severe or the treatment most lamentable.

As noted above, very mild sprains usually recover after a slight rest. The more severe forms of the accident require elevation of the limb and support to the foot, a local bath as hot as can be borne, to be repeated every three hours, after each bath enveloping the ankle generously in cotton batting and applying over it a flannel bandage tightly or a rubber bandage loosely. After the third day, the stage of active hyperæmia having passed, massage may be used on the parts, and when the swelling has somewhat subsided, a gypsum or starch bandage applied. The splint should include the foot, excepting the toes, and extend one-half to two-thirds up the leg, and when hardened be cut open down the front and thus a removable splint be made. The hot foot-bath is continued several times during the day, from ten to twenty minutes at a time, the limb dried and then well massaged. If the skin is moist a little vaseline may be used on the hands as a lubricant. A precaution should be used in working the foot not to turn it in, otherwise the external lateral ligament fibres, of which were torn and stretched, now undergoing repair, slowly because of their low vitality or meagre blood supply, may be re-torn, the tender parts bruised, pain caused and repair delayed. A patient thus suffered severely; while his foot was in the bath, he turned the sole in and pressed upon the outer side, violently twisting the foot inward, causing exquisite pain and retarding recovery.

With the massage, electricity finds a useful place. I have used indiscriminately well both the galvanic and faradic currents. If the part is sensitive and painful a mild current of short application is used, the hand making a convenient and agreeable electrode.

In old cases with painful ankle and tarsus, joint stiff and foot in position of slight equinus, I divide the tendo achillis, and while the patient is still under the anæsthetic, move the ankle freely, thus breaking up adhesions. After a few days I follow up with hot water baths, energetic massage and electricity, and a leather boot made of heavy stock over a plaster of Paris cast of a part, laced up in front. This affords equable compression and thoroughly immobilizes the ankle between the rubbings. In rheumatic subjects I thought I obtained good results from the administration of iodide of potassium.

In children, sprains as a rule rapidly recover; or as rapidly degenerate into chronic joint disease with involvement of the articular structures, if in a scrofulous, tuberculous or ill-conditioned patient. Sprains are a fruitful cause of joint disease in children. If the case has gone on to articular involvement, then continued quiet to the part with improved hygienic surroundings would find place in the treatment.

I understand that the base-ball men place their sprained ankles, to which accident you may readily believe they are exposed, in protracted hot water baths, with massage and gentle use, and expect rapid recoveries.

The *rationale* of the improvement under hot water is that the vasomotor nerves are stimulated, and thus dilated vessels contract; possibly, too, it acts as a surface revulsive. I have yet to see the patient who complained that the baths were uncomfortable. On the contrary they afford ease and give suppleness to the joint.

The older writers tell us either cold or heat, whichever is most comfortable to the patient. This I believe to be a mistake, for if cold is used, thereby "the flow of blood is lessened and the outlet to effused products by veins and lymphatics are also rendered more impermeable in consequence of the contraction will all the other tissues which are cooled," and, too, nutritive action will be suspended and the process of repair hindered, and continual cold might lead to gangrene.

If the ankle and foot are sensitive to the touch, then it will be better to commence the massage a little distance from the injured region and gradually to approach it. Thus the parts will be more tolerant as the pain diminishes and the swelling subsides. The pain is relieved by the removal of the pressure from the terminal nerve filaments. Elevated temperature is reduced by the hastened absorption, and thus the removal of the tension which causes lymphatic and venous stasis and exudation. At the same time the area and speed of the circulation are

increased in both the occluded and open vessels. The relief to the joint, even after a single sitting, would hardly be believed unless experienced or witnessed. In old and neglected cases where there is capsular and periarticular thickening, induration and hyperplasia of an indolent character, the kneading and stroking should be of an energetic character with increasing passive motion; indurations and adhesions will thus be softened, broken up and absorbed.

Do some plead an unfamiliarity with the necessary manipulation to do the requisite massage after sprains? It is not a difficult matter. There are now published short treatises on the subject, so that the medical man can acquaint himself with the *modus operandi* and indications for this revived, excellent therapeutic procedure. In our medical schools, with their lengthened terms, time should be taken to thoroughly teach massage. There is no reason why it should be a secret locked up with the unprofessional. Such was the history of electricity. For many years and until recently traveling quacks monopolized this occult agent as a remedy for the relief of human ailments. It now has a legitimate place in the therapeutics of our schools. So it should be with massage.

We are glad that scientific men, professional and otherwise, are boldly attacking the ins and outs of hypnotism—mesmerism. We are not bound, like certain religious denominations, to fixed creeds that would bar out investigation and truths which may come within the purview of our aims, namely, the prevention and curing of disease.—*Port Wayne Jour. of Med. Sciences.*

#### CORROSIVE SUBLIMATE AS A DISINFECTANT.

Dr. A. C. Abbot (Johns Hopkins Hospital Bulletin, April, 1891) has published the results of his careful and thorough investigation of the destructive power of solutions of corrosive sublimate upon the most common of the microorganisms of suppuration, the *staphylococcus pyogenes aureus*. From these investigations he comes to the following conclusions:

Under the most favorable conditions a given amount of sublimate has the property of rendering inert only a certain number of individual organisms. That is to say, the process is a definite chemical one, taking place between the protoplasm of the individual bacteria and the sublimate in the solution. The disinfecting activity of the sublimate against organisms is profoundly influenced by the proportion of albuminous material contained in the medium in which the bacteria are present. The relation between the golden pyogenic staphylococci and sublimate is not a constant one, organisms from different sources and of different ages behaving

differently when exposed to the same amount of the disinfectant, for the same length of time. The organisms which survive the exposure to the sublimate may experience a temporary attenuation. This attenuation, however, may be caused to disappear by successive cultivation in normal media. By the method employed in these experiments it is possible to select from a culture the most resistant forms in that culture. Many of the results of previous experimenters, who have assigned to corrosive sublimate more powerful disinfectant properties against the staphylococcus pyogenes aureus in cultures than the observations reported in this paper indicate, are attributable to the neglect of certain precautions now recognized as essential to the proper conduct of such experiments.

In the light of these experiments and those of the experimenters quoted in the paper, it is plain that for use in surgical practice the solutions of corrosive sublimate do not possess all of the advantages hitherto attributed to them.

To the employment of sublimate solutions upon wound-surfaces, it is plain that there exist at least two serious objections. First, the albumen of the tissues and fluids of the body tends to diminish the strength of, or indeed renders entirely inert, the solution employed. And second, the integrity of the tissues is materially injured by the application of solutions of this salt.

The first objection cannot be met with certainty, for the surgeon possesses no means by which he can determine the amount of albuminous material with which his solutions are to come in contact, and in any case this large amount of albuminous material is an almost insuperable obstacle to complete disinfection with sublimate. He is, therefore, never in a position to say, *a priori*, that his efforts at disinfection of the wound are or are not successful.

The second objection is equally serious. During the past two years we have had sufficient evidence to lead us to believe that the normal tissues and fluids of the body possess the power of rendering inert many kinds of organisms which may have gained access to them. This function is therefore diminished, or, indeed, may be quite destroyed, by any agent which brings about alterations in the constitution of these tissues. We know that just such changes as those to which we refer are known to follow the application of sublimate solutions. It is plain, then, if we bring about in these tissues a condition of superficial necrosis, the condition following upon the application of sublimate, they are much less able to resist the inroads of infectious organisms than they would have been had they been left in their natural condition.

As a disinfectant, in the strict sense of the word, there are, perhaps, few substances which possess the property in a higher degree than does corrosive sublimate, but at the same time

there is nothing which is employed for this purpose that requires greater care in its manipulation in order to obtain its best results than does this salt. Its action is influenced by a number of conditions which in practical application it is difficult if not quite impossible to control.

For these reasons we seem hardly justified in continuing to give to it the first place in the list of substances which may be employed practically for the purpose of rendering harmless materials containing the germs of infectious maladies. —*Sanitarian*.

## THE TREATMENT OF WHOOPING COUGH.

The following treatment is used very largely by certain of the leading specialists in diseases of children in Paris, in cases of whooping cough. It is divided into three periods. The patient should remain in one room or in bed, and the physician employs belladonna and small doses of opium with aconite, as in the following prescription:—

R. Tincture of aconite, }  
Tincture of belladonna, } of each  
Camphorated tincture of }  
opium, } 1 drachm.

Two to five drops once or twice a day, according to the age of the child, is the proper dose. If there is no febrile movement the amount of the aconite can be much decreased, and if constipation is present the opium should not be used. In the second period, or when vomiting comes on, ipecac may be given in small amounts to allay gastric irritation, and in the third period when convalescence is established cod-liver oil, tonics, and Fowler's solution will be found of service.—*Col. and Clin. Record*.

For venomous bites and stings:

R. Permanganate of potash, ʒj  
Glycerine, ʒiv M.

Sig. Apply promptly and freely to the wound.

For insomnia:

R. Chloral hydrate.  
Bromide of potash, aa grs. x  
Aqua para, ʒi M.

S. D. On going to bed.

R. Sulfonal, grs. x—xij  
Aqua menth.,  
Glycerine, aa ʒij M.

S. D. Two or three hours before sleep is desired.

R. Somnal, ʒss  
Syrup of tolu, ʒij M.

S. D. On retiring. Somnal is less depressing than chloral or sulfonal.—*Kansas Med. Jour.*

## DIET IN DISEASES OF THE KIDNEYS.

Sassjadke finds, that while vegetable diet diminishes the amount of albuminuria, it is not well borne for any length of time. Under its exclusive employment, nephritic patients soon become apathetic, and the blood pressure is diminished.

Animal diet is found to increase the amount of albuminuria, but on the other hand, it improves the general condition of the patient, and raises the blood pressure. A mixed diet has about the same effect as an exclusively animal diet.

Since we regard nephritis not as an affection of the kidneys only, but rather one involving the whole circulatory system, we must in the treatment not only prescribe substances which restrict the excretion of albumen, but we must also attempt, by suitable diet, to improve the general nutrition of the patient, and thus relieve the phenomena of ischaemia.

The mixed animal and vegetable is found to be most suitable for nephritic patients. Chestnuts have been found to lessen the amount of albumen in the urine.—*Wratsch. Centbl. f. Therap.—Med. Review.*

## WHEN TO GIVE STIMULANTS IN FEVERS.

The *Therapeutic Gazette* discusses this subject, and very properly remarks: In the aged and debilitated, when attacked with pneumonia, typhoid or any other febrile disease of more than ephemeral duration, the expediency of early beginning a stimulating treatment is everywhere recognized. The attending physician will be very chary in the use of veratrum or antimonials, and will from the very first order some wine or brandy, in such doses as will, in his judgement, sustain the heart and nervous system. Unfortunately, such persons are bad subjects for pneumonia or typhoid, and will often sink about the sixth or seventh day, despite the most careful supporting treatment.

Among the "classic" signs indicative of the necessity of stimulants, we have the dry, brown tongue, sordes in the mouth, stupor or sub-delirium, coldness of the surface, a peculiar fever odor, often present from the first, feebleness and irregularity of the heart's action. The quick, soft, compressible, wavy pulse calls for alcohol. Perhaps no better rules, based on the condition of the heart, can be formulated for the administration of stimulants than those which Stokes has laid down for our guidance. The following, according to him, are the physical signs which seem to indicate the early use of stimulants:

1. Early subsidence of the first sound, observed over the left ventricle. 2. Diminution of the first sound over the right ventricle. 3. The

heart acting with a single, and that the second, sound. 4. Both sounds being audible, but their relative intensity being changed so as to represent the action of the heart of a fetus *in utero*. 5. With these signs a progressive diminution of impulse, which occasionally becomes imperceptible, even when the patient lies on the left side.

As to the quantity of alcohol to be administered, everything will depend on the condition and previous habits and idiosyncrasies of the patient. An adult male patient, about the fifteenth day (or about the time of crisis) of typhoid fever, with nervous and circulatory symptoms, indicating a tendency to sinking, will often bear enormous quantities of alcohol, and it is not an uncommon event for patients in this condition to be dosed to the extent of a quart of wine or a quart of brandy in the twenty-four hours. The most judicious practitioners are disposed to exercise moderation in alcoholizing patients, even in states of asystolism, and believe that nothing is gained by exceeding an ounce of good whisky or brandy per hour; if this will not save life, more will be inefficacious.—*Med. Progress.*

## THE PREVENTION OF OPHTHALMIA NEONATORUM.

The *Revue Générale de Clinique et de Thérapeutique* gives the following treatment used by Valenta for the prevention of this dangerous affection of the new-born. After pointing out that Credé's method, that is, the instillation of solutions of nitrate of silver, possesses many dangers, he proposes that we replace the liquid by solutions of permanganate of potash. The solution which he employs is sufficiently concentrated to be of a dark red color. This is to be applied to the eyelids by means of a cotton tampon, and immediately afterwards by the aid of another tampon the conjunctival sac is to be cleansed. These operations should be performed immediately after birth if they are to be successful.—*Med. News.*

## CARBOLATE OF CAMPHOR.

This preparation is made (*Therapeutic Gazette*, Feb., 1891.) by adding one part, by weight, of carbolic acid to three parts of camphor, setting aside for twenty-four hours, and straining through gauze. It is a permanent liquid, with a specific gravity of 99°. It is thoroughly antiseptic, and possesses unsurpassed germicidal powers. Locally applied to wounds, by means of cotton or gauze, it prevents suppuration. When kept in contact with the skin for several days it produced an eruption, which can, however, be prevented by mixing the liquid with oil. Injected hypodermatically, it gives the best results in aborting abscesses or boils and relieving pain.

When placed under the skin it produces anesthesia of the surrounding parts, which lasts for several hours. There is some soreness, but no abscess results. The slight smarting felt at first shortly disappears. For hypodermatic use, a little ether or pure alcohol should be added to the liquid.

Carbolate of camphor combines readily with alcohol, ether, fixed and essential oil and petroleum derivatives, but *not* with aqueous solutions or glycerine. It readily dissolves menthol, cocaine, salicylic acid, chloral hydrate, iodoform and corrosive sublimate.

According to M. B. Cochran, carbolate of camphor gives excellent results when locally applied in inflammations or ulcerations of the tonsils, pharynx or cervix uteri, and as a dressing in all kinds of wounds, where it readily prevents suppuration and acts as an antiseptic. As a lubricant in massage it is unsurpassed, especially in contracted muscles and stiffened joints. In herpes and erysipelas, applied with a soft brush, the remedy acts as a specific, relieving the pain and causing a healing process to be set up at once.

The writer reports a case of the latter affection in a child three weeks old. There was intense swelling of the face, the eyes had not been seen for two days, and the lips were so swollen that the infant could not suckle. The disease was rapidly advancing to the scalp. A mixture of one part of carbolate of camphor to two parts of olive oil was brushed over the face every three or four hours. The disorder was checked from the first applications. In twenty-four hours a marked change was observed. The child made a final recovery.

Good effects have been observed from the use of the remedy in vaginitis, vulvitis and pruritus vulvæ; also from its employment in cases of frost-bite. The best results have been obtained by internal administration in the form of capsules, in cases of gastric and intestinal catarrh. —*Med. Progress.*

#### IPÉCACUANA TO INCREASE LABOR PAINS.

Drapes (*Les Nouv. Remed.*) affirms that ipecac, in the form of wine of ipecac, in the dose of ten to fifteen drops, repeated every ten minutes, constitutes a powerful remedy to provoke strong contractions of the uterus in a case of uterine inertia or rigidity of the cervix, which threatens to indefinitely prolong the labor. After the second or third dose strong uterine contractions will come on, will repeat themselves at regular intervals and tend to rapidly bring the labor to an end. That which makes ipecac in this condition superior to ergot of rye is that it never provokes tetanic contraction of the uterus, so frequent after the administration of ergot. —*Med. Progress.*

#### HYPERÆSTHESIA OF THE LARYNX.

The *Révue Général de Clinique et de Thérapeutique* gives the following treatment of Moure for those hysterical cases of hyperæsthesia or anæsthesia of the larynx. Internally he prescribes large doses of bromide of potassium for hyperæsthesia, or the sulphate of strychnia to those who have anæsthesia.

Externally he makes application of the following on each side of the larynx :

R. Hydrochlorate of cocaine,	
dissolved in alcohol.	2 grains.
Metallic iodine,	$\frac{1}{2}$ grain.
Iodide of potassium,	$1\frac{1}{2}$ grains.
Laudanum,	15 drops.
Pure glycerin,	$1\frac{1}{2}$ ounces.

Or,

R. Hydrochlorate of cocaine,	
dissolved in alcohol,	4 grains.
Laudanum,	15 drops.
Bromide of potassium,	45 grains.
Pure glycerin,	1 ounce.

Or in other cases morphine may be used in place of the cocaine as follows :

R. Hydrochlorate of morphine,	2 grains.
Metallic iodine,	$\frac{1}{2}$ grain.
Iodide of potassium,	$1\frac{1}{2}$ grains.
Pure glycerin,	1 ounce.

—*Med. News.*

#### INJECTION FOR HYPERTROPHY OF THE PROSTATE.

*La Tribune Médicale* gives the following prescriptions from the practice of Kobner for the relief of hypertrophy of the prostate :

R. Iodide of potassium,	45 grains.
Bromide of potassium,	$\frac{1}{2}$ drachm.
Extract of belladonna,	4 grains.
Water,	6 ounces.

This is enough for 20 rectal injections. Six drachms of this solution in from two to four ounces of hot water may be employed once or twice a day, or the following may be used :

R. Iodide of potassium,	$2\frac{1}{2}$ drachms.
Bromide of potassium,	2 " "
Extract of belladonna,	8 grains.
Water,	10 ounces.

Six drachms of this may be injected twice a day into the bowel.

Five to ten drops of pure tincture of iodine may be placed in the liquid if the large intestine will bear it. —*Med. News.*



## COMPOSITION OF "ANTIKAMNIA."

One of the natural outgrowths of secret pharmacy is *fraud*, and so long as the vicious custom is encouraged by medical men, so long will the profession be hoodwinked and the public abused by unscrupulous dealers. The latest money-making scheme on the basis of deceit is "Antikamnia, the American Antipyretic, Analgesic and Anodyne," a product of the Antikamnia Chemical Company of St. Louis. Mr. Louis Emanuel, a pharmacist of this city, first called our attention to the composition of this "new derivative of the coal-tar series," and since then (about March 1st), several analyses of it have appeared from various sources. These different investigators have all arrived at essentially the same result, that Antikamnia is composed of acetanilid about 7 parts, sodium bicarbonate about 1 part, and a small amount of tartaric acid. The most harmless part of this fraud is the price charged for the compound. Acetanilid can be bought for about ten cents an ounce, sodium bicarbonate costs next to nothing, and this company mixes the ingredients in the proportions named, sells the product for one dollar an ounce, and claims a merit for cheapness! The medical journals of the country have been easy, probably even willing, victims of these swindlers, in that they have advertised this compound extensively. The story of Antikamnia, like that of Gleditschine, is an unanswerable argument in favor of the Review's position on the question of ethical advertising.—*Pittsburgh Med. Review*.

## TREATMENT OF FISSURED NIPPLE AND ENGORGED MAMMARY GLAND.

In the treatment of fissured nipple, where the cracks are at all extensive, the ordinary remedies recommended from time to time have been found more or less unsatisfactory. Painting with tincture of benzoin, for instance, while an excellent procedure for small superficial cracks of the nipple, is perfectly worthless in more advanced cases.

The writer has found in hospital and private practice that excellent results can be secured in bad cases by the application of an ointment made of equal parts of castor oil and subnitrate of bismuth. This mixture makes a very smooth, soft ointment, which relieves the pain, and is an excellent protective to the part. Before application, the nipple and surrounding skin should be carefully cleansed and disinfected, and then the ointment should be smeared on plentifully. If it is necessary for the child to nurse from the affected nipple, it can be allowed to do so without the necessity of removing the ointment from the nipple, as must be done if tannic acid or the salts of lead are used. This is a serious disadvantage of many forms of

treatment recommended for fissured nipple, for the irritation of removing the substance employed as a local sedative neutralizes its action.

For the engorgement and pain in the mammary gland itself which so often accompanies fissured nipple, the writer has had excellent results from the use of an application of lead water and laudanum, which is applied by means of a cloth covering the whole breast, renewed at frequent intervals, and kept in place by a suitable mammary binder, either that recommended by Richardson or the Murphy bandage. This not only retains the dressing, but supports the breast and exercises even pressure upon it. With this treatment the development of mammary abscess is a rare event. If the child can be nursed from the other breast alone it is safer, I think, to draw the milk from the affected gland by means of a breast-pump until the cure is almost complete. If it is necessary that the child should nurse from the cracked nipple, a glass nipple shield with a rubber tip must be employed.—*Barton Cooke Hirst, M. D., in Univ. Med. Mag.—Pittsburgh Med. Review*.

## HOT WATER FOR SLEEPLESSNESS.

A most wretched lie-awake of thirty-five years, who thought himself happy if he could get twenty minutes' sleep in twenty-four hours, said: I took hot water, a pint, comfortably hot, one good hour before each of my three meals, and one the last thing at night, naturally unmixed with any thing else. The very first night I slept for three hours on end, turned around and slept again till morning. I have faithfully and regularly continued the hot water, and have never had one bad night since. Pain gradually lessened and went, the shattered nerves became calm and strong, and instead of each night being one long misery spent in wearying for the morning, they are all too short for the sweet, refreshing sleep I now enjoy.—*London Spectator.—Pittsburgh Med. Review*.

## THE TREATMENT OF DIABETES BY ARSENIC.

Few diseases have been subjected to so many methods of treatment, hygienic, dietetic, and remedial, as diabetes mellitus. The reason is obvious. The causes of the malady are as yet enshrouded in obscurity, and the fact is not to be wondered at that all treatment is, even at present, mainly empirical. Recent observations appear to show that of drugs that have been asserted by various writers as producing excellent results in diabetes, alteratives take the lead, such, for instance, as iodine and its compounds, especially iodoform and iodol.

Arsenic has been given a trial, with satisfac-



tory results. Thus Cutherton (*Medical Standard*, March, 1891) reports five interesting cases of marked diabetes, where the use of arsenic in the form of Fowler's solution, combined with tincture of calumba, gave the best results. The drug was given in doses of three minims thrice daily, the ages of the patients varying from 28 to 62 years. The use of the drug was accompanied by the observance of a diabetic diet and the best hygienic surroundings, and the good results were seen in from two to four weeks. In one instance codeine had to be employed to aid the action of the alterative. The alkaloid was given in doses of two grains every two hours, gradually increasing it to fifteen grains in the twenty-four hours, but finally all the cases yielded to arsenic.

It is worthy of note that four out of the five cases reported were women, and the results confirm those obtained by previous observers, such as Trousseau, Owen Rees, Deenerge, Foville, and others. The author believes that in these cases of diabetes arsenic does good by increasing the activity of the blood corpuscles, enabling the hæmoglobin to resist the toxic effects of the sugar by parting more readily with its oxygen and absorbing carbonic oxide.—*Univ. Med. Magazine*.—*Pittsburgh Med. Review*.

### TREATMENT OF ACNE.

Capozi recommends in the treatment of acne the following solution :

R. Washed and precipitated sulphur,	} of each 2½ drachms.
Powdered glycerin,	
Carbonate of potassium,	
Cherry-laurel water,	
Distilled water,	

After thoroughly washing the part which is affected this mixture is to be applied at night, and may be replaced by an application of oxide of zinc ointment or glycerin.—*Med. News*.

### THE TREATMENT OF CARDIAC ASTHMA.

*The Journal de Médecine de Paris* gives the following treatment of Ferrand for cardiac asthma, which is divided into several parts. The general treatment consists in the administration of 2 teaspoonfuls of the following solution every morning :

R. Iodide of sodium,	6 drachms.
Infusion of inula,	10 ounces.

At night, after supper, two tablespoonfuls of a solution of bromide of sodium and aconite are to be given, made as follows :

R. Bromide of sodium,	6 drachms.
Tincture of aconite,	16 drops.
Infusion of hops,	8 ounces.

The treatment of an attack of asthma is to inspire steam arising from a vessel of hot water, and if possible containing the fumes of ammonium. 5 drops of the following mixture may be given every five or ten minutes :

R. Laudanum,	1 drachm.
Cherry-laurel water,	1½ drachms.

At the same time a subcutaneous injection of the following will be found of advantage :

R. Sulphate of atropine,	1-10 grain.
Sulphate of morphine,	3 grains.
Cherry-laurel water,	2½ drachms.

Twenty minims of this may be injected at a time. After the attack has passed by, the following may be given :

R. Extract of stramonium,	} of each 1 grain.
Valerianate of zinc,	
— <i>Med. News.</i>	

### TREATMENT OF CORYZA.

In the treatment of coryza Kola recommends that a teaspoonful of powdered camphor be added to a pitcher of boiling water, and that a cone be placed over the mouth of the vessel, the other end of the cone being placed over the nose and mouth of the patient. The vapor which arises from the water is charged with the camphor, and may be inhaled for from five to ten minutes. Three inhalations are usually sufficient to arrest the most rebellious coryza. These inhalations provoke a most abundant secretion from the nasal and pharyngeal mucous membrane, and exert a favorable effect upon the inflamed parts.—*L'Union Médicale*.—*Med. News*.

### TRICHLORACETIC ACID AS A CAUSTIC.

This acid has been largely employed by Ehrmann in the treatment of maladies of the nose and throat. A crystal of the acid may be applied to the part affected, when it forms a white scab, which is rapidly detached. From an experience with 140 cases Ehrmann concludes that this acid occupies the first rank in the treatment of maladies of the nose and pharynx. It may be used with great advantage with an astringent, and the following formula is recommended by the writer :

R. Iodine,	4 drachms.
Iodide of potassium,	5 "
Trichloroacetic acid,	4 to 8 "
Glycerin,	8 "

Apply to the part with a tampon.

One drop of this solution is not disagreeable, and it is followed by very little pain. In the treatment of follicular tonsillitis Ehrmann found

it to produce a cure after three applications, and in two cases of ozena the effects were very good indeed. Among fourteen cases of chronic pharyngitis there were eight cures and six notable ameliorations. A number of other instances are given in which equally good results were obtained.—*L'Union Médicale*.—*Med. News*.

#### TREATMENT OF DIARRHOEA BY SALOL.

Moncorvo has published an interesting paper concerning the use of salol in infantile diarrhoea. He considers it an exceedingly useful agent in the production of intestinal antiseptis in infants who are affected with enteritis or entero-colitis. The passages rapidly diminish in number under the influence of the drug and lose their disagreeable odor a few days after administration. The flatus which arises from intestinal fermentation is decreased by the action of the salol. He thinks that the drug may be used with advantage in infants of all ages, and that it is very rare for it to produce any untoward effects. The dose which he employed was from 2 to 30 grains in twenty-four hours, according to the age and gravity of the case.—*Revue Internationale de Bibliographie Médicale*.—*Med. News*.

#### THE COLITIS OF INFANTS.

Dr. James M. French, in his valuable contribution, gives the following dietetic and medicinal treatment for colitis of infants: The child must receive the proper quantity of the right kind of food at the right intervals for its age. Not seldom the error will be found to consist in the too early resort to a mixed diet, too frequent nursing, or the use of such inferior substitutes for mother's milk as impure milk, condensed milk, or an inferior quality of artificial food, or in the use of improperly prepared food. The diet should consist of articles of food which are most certain to undergo early and complete digestion, leaving as little residue as possible. The passage of healthy faeces from the small intestine into the larger in these cases is sufficient to excite peristalsis. For this reason over-feeding must be guarded against.

Ordinarily, the diet of nursing infants may be restricted to the mother's milk, and that of infants that have been weaned, to sterilized cow's milk. In severe cases, however, it is necessary to discontinue even cow's milk for a time. By this means the inflamed bowel is freed from the influences which keep up the inflammation. Something must be given both to provide nourishment and to satisfy thirst; for this the author highly indorses Mellin's Food, prepared with water instead of milk, as it forms ample nutriment and leaves almost no residue in the bowel. In addition to this, an occasional teaspoonful of

freshly expressed beef juice and a few drops of brandy may be given. The writer rarely employs any medicines other than those contained in the following prescriptions:

R. Pepsine (F. & F.) gr. xii to xxiv.  
Hydrarg. chlor. mit., gr. ss to j.  
Sacch. lactis., q, s.,  
M. et ft. chart., No. xii.

Sig.—One powder every three hours after nursing.

R. Ex. pancreatis (F. & F.), ʒss to j.  
Hydrarg. chlor. mit., gr. ss to j.  
Sacch. lactis, q, s.  
M. et ft. chart., No. xii.

Sig.—One powder every three hours immediately before or after nursing.—*Annals Gynecology and Pediatrics*.

#### A LOCAL ANÆSTHETIC FORMULA.

Local anaesthesia is produced at one of the leading hospitals by means of a spray composed of ten parts of chloroform, fifteen parts of ether and one part of menthol. After one minute's application of this compound spray, complete anaesthesia of the skin and neighboring tissues is produced and will persist from two to six minutes. This suffices for some minor operations, such as opening an abscess of the cervical glands, incising a deep-seated whitlow, or excising an epithelioma of the nose, etc.—*Medical Age*.

#### OINTMENT FOR ACNE.

*L'Union Médicale* states that Isaac uses the following prescription in acne:

R. Resorcin,  $\frac{1}{2}$  to 1 drachm.  
Powdered oxide of zinc, } of each  
Powdered starch, } 1 drachm.  
Vaseline, 2 drachms.

This is to be applied day and night to the affected part. If it is not desired to apply it during the daytime, it may be removed by the aid of olive oil and soap and followed by an inert absorbent powder.—*Med. News*.

#### TREATMENT OF ALOPECIA.

Monin recommends the following treatment of alopecia:

R. Gallic acid, 45 grains.  
Olive oil, 6 drachms.  
Vaseline, 1½ ounces.  
Essence of lavender, 15 drops.

This is to be made into an ointment and applied with friction to the part affected morning and night for the arrest of the disease.—*L'Union Médicale*.—*Med. News*.

## PILOCARPINE IN DISEASES OF THE EAR.

Since 1880, Politzer (*Lancet*, January 3, 1891), has employed subcutaneous injections of muriate of pilocarpine in every variety of recent and of chronic affections of the labyrinth, often with excellent results. He uses a two per cent. solution. At first two drops of this are injected under the skin of the arm, and the dose is increased by one drop each day until eight drops are given at an injection. Soon after the injection there is increased secretion of saliva and sweat for about forty-five minutes. If there are disagreeable effects, such as nausea, giddiness, faintness, etc., they may be overcome by the administration of a small dose of atropine. The injections should be made daily. If, after two weeks, the remedy does not produce an improvement of hearing, it must be regarded as ineffectual, and should not be continued; but if the hearing improves, the injections should be continued as long as the improvement progresses.

Dr. Politzer summarizes his opinions as follows:

1. The subcutaneous injection of pilocarpine is particularly indicated in recent affections of the labyrinth, be they syphilitic or not.

2. The injections are of little use in acute inflammation of the middle ear.

3. They are decidedly contra-indicated in cases of dry sclerotic catarrh of the middle ear.

4. Injections of several drops of a two per cent. solution into the tympanic cavity through a catheter are beneficial in some cases of catarrh with swelling and slight secretion. In such cases the injections should be given for from one to two weeks alternately with Politzer's method of inflation.—*Med. News*.

## TREATMENT OF LARYNGITIS.

Moure recommends the following to be used in the treatment of laryngitis:

R	Crystallized carbolic acid,	7-15 grains.
	Hydrochlorate of cocaine,	7 " "
	Opium,	1½ ounces.
	Distilled water,	10 " "

This may be applied by means of a brush three times a day, or

	Boric acid,	1 drachm.
	Crystallized resorcin,	½ " "
	Cherry laurel water,	1½ ounces.
	Distilled water,	10 " "

This mixture may be used in an atomizer for from three to five minutes morning and night, or three or four times a day if the condition of the throat is subacutely affected.—*La Tribune Médicale*.—*Med. News*.

## TREATMENT OF SCIATICA.

Jaccoud gives the following treatment for cases of sciatica. During the acute period severe counter-irritation or local depletion may be resorted to over the affected limb and hypodermic injections of morphine are to be given. If anaemia is present to any great degree severe vesication is not to be applied. If the disease is due to rheumatism it should be treated by the internal administration of salicylate of sodium given in the dose of from ½ to 1 drachm a day. Other cases may require large doses of quinine. Jaccoud prescribes the hydrobromate of quinine in the dose of 15 to 30 grains a day, and continues it until the symptoms of its physiological action become manifest. In this case the treatment is suspended for one or two days and then begun again. When sciatica passes into a chronic state in which it recurs, it is best to administer a mixture containing iodide and bromide of potassium in the dose of from ½ to 1 drachm each to be dissolved in a suitable vehicle, such as sarsaparilla. Externally resorcin may be resorted to and simple vapor baths or turpentine vapor baths may be used. The pain may be relieved by morphine.—*L'Union Médicale*.—*Med. News*.

## PILLS FOR DYSENTERY.

The following pills used in the treatment of dysentery have given satisfactory results:

R.	Powdered ipecac,	4 grains.
	Calomel,	1½ " "
	Extract of opium,	1 grain.

Make into three pills, and give one each hour, in the treatment of diarrhoea or dysentery due to exposure to heat.—*Med. News*.

## ABORTIVE TREATMENT OF HERPES.

In those persons in whom herpes occurs periodically and produces much pain and discomfort Leloir recommends the employment of resorcin, thymol or menthol in one of the following solutions:

R.	Resorcin,	30 grains.
	Alcohol,	3 ounces.
Or,		
R.	Menthol,	30 grains.
	Alcohol,	4 ounces.

If the pain following this application is very severe, the following formula may be employed in place of the other two:

R.	Hydrochlorate of cocaine,	15 grains.
	Extract of cannabis indica,	2½ drachms.
	Essence of peppermint,	2½ " "
	Alcohol,	4 ounces.

It is also well to cover the sore spot with some impermeable dressing, in order to protect it from the air.—*Gazette Hospital de Paris*—*Med. News*.

## NUTRITIVE VALUE OF RECTAL INJECTIONS OF EGG ALBUMEN.

The assertions of Voit and Bauer and Eichhorst to the effect that egg albumen is absorbed by the rectum only in the presence of a certain proportion of chloride of sodium, but is returned unaltered with the feces if this reagent be absent, has led the author to investigate this point anew, and to make his observations on man, and not on dogs, as his predecessors had done. The experiments were planned with great care, and the quantity of albumen removed from the body, both by the urine and the feces, was estimated. As the outcome of several series of experiments, the results of which show a great agreement. Huber gives as his conclusion that egg albumen simply beaten up is absorbed by the rectum, but only in very small quantities, and consequently a nutrient enema of this kind possesses hardly any value. When, however, a certain amount of common salt is added (15 grains to each egg in the present series of experiment), the quantity of albumen absorbed is doubled. Peptonized egg albumen was absorbed in very slightly greater proportion than that treated with common salt. Of the albumen thus treated with salt, between sixty and seventy per cent. was absorbed, and we, therefore, have in this mixture an extremely valuable material for nutrient enemata.

In no case of Huber's were the enemata expelled; nor was albuminuria ever found to occur after their use.—*The Medical Chronicle*.—*Nashville Jour. of Med. and Surg.*

## TREATMENT OF THE VOMITING OF PREGNANCY.

The *Deutsche medicinische Wochenschrift* recommends the following treatment for vomiting of pregnancy:

R. Creasote,	10 drops.
Acetic acid,	20 "
Sulphate of morphine,	1 grain.
Distilled water,	1 ounce.

A small teaspoonful every half-hour until four doses have been taken.—*Med. News.*

## POWDER FOR ACUTE ECZEMA.

*La Semaine Medical* gives the following prescription of Alexinski for this condition:

R. Oxide of Zinc,	15 grains.
Subnitrate of Bismuth,	30 grains.
Powdered Starch,	1½ drachms.
Powdered Lycopodium,	1½ drachms.

This powder is to be dusted over the parts which are affected, night and morning.—*Cincinnati Med. Journal*.—*Pittsburgh Med. Review.*

## IODIDE OF POTASSIUM IN THE TREATMENT OF URTICARIA.

Stern has successfully treated five cases of chronic urticaria by the administration of iodide of potassium, four of the cases having been rebellious to all the measures usually employed in this disease. The fifth case was one of acute urticaria of a few days' duration. None of the patients were syphilitic, and all were rapidly cured. In one case which had lasted for four months the intolerable itching disappeared on the second day of treatment and a complete cure was obtained after two and a half drachms of the iodide had been administered. In two other cases, one of two years' and the other of six years' duration, the effect of the iodide was equally good, cure following the administration of six and eight drachms respectively.—*Lon. Med. Record*.—*Nashville Jour. of Med. and Surg.*

## TREATMENT OF SEBORRHOIC ECZEMA.

Dubreuilh states that this affection, which is difficult of treatment, will yield to the following application, if made twice a day:

R. Oxide of zinc,	2 drachms.
Washed sulphur,	1 drachm.
Salicylic acid,	15 grains.
Vaseline,	1 ounce.

—*Med. News.*

## TEST OF COMPLETE CHLOROFORM NARCOSIS.

Guelliot (*Journal de Medecine de Paris*) claims that the absence of the cremasteric reflex is one of the best and readiest means of determining complete chloroform narcosis. The quickness and force with which the reaction is produced is some index of the degree of narcosis. The point seems to be one well worthy of consideration by the practical surgeon.—*Jour. Am. Med. Assoc.*—*Pittsburgh Med. Review.*

## ANTISEPTIC APPLICATION FOR DIPHTHERIA.

Le Gendre recommends the employment of

R. Borate of sodium,	} of each 1
Chlorate of potassium,	
Carbolic acid,	3 grains.
Glycerin,	2½ drachms.
White honey,	1 ounce.

The mixture is to be applied to the portion of the throat which is involved in the disease by means of a camel's hair brush.—*La Tribune Médicale*.—*Med. News.*

# PSEUDO-MEMBRANEOUS LARYNGITIS TREATED BY MERCURIAL FUMIGATION.

By A. J. Lieber, M. D.

Thinking that the above subject would interest the Fellows, especially our country brethren whose operating cases and intubating instruments are not always at hand, I have concluded to write upon it.

For this advance in therapeutics we are all indebted to Dr. J. Corbin, of Brooklyn, N. Y., who, in 1881, read a paper on this subject before the Kings County Medical Society.

On March 30, 1890, I was called to see George H., three years old. On examination I found diphtheritic membrane on both tonsils. The disease ran a mild course for five days, when there was evident extension of the larynx. One forty-eighth of a grain of bichloride of mercury was given every three hours, and the oleate of mercury freely used by inunction. The vapors from slaking lime were faithfully used. Under this treatment the disease rapidly advanced, and twenty-four hours later it seemed to me that a fatal termination could not be long deferred. I then approached the father and told him that the only chance left was to perform tracheotomy or intubation. I could not do the latter operation, as I had no instruments to do it with, but if he was willing I said I would call in help and perform tracheotomy. He positively declined any operation. I was about to leave the house, and was warming my feet, for I had a good long ride of seven miles before me, when I recalled Dr. Corbin's suggestions and acted upon them at once.

The child was placed in an improvised tent, and thirty grains of calomel were burned under it every half hour for six hours, I having ordered it repeated as often as the character of respiration became alarming. The next morning the patient was decidedly better, and the intervals of fumigation were extended to three hours. The following night it was used twice; the next day once, and was not required after that; a good recovery followed.

Although the method of using mercurial fumigation is simple, it has been misused, and for that reason I venture to give a description recently given by Dr. Law, of Brooklyn. The apparatus consists of a tent and an alcohol lamp with arms to support a piece of sheet iron. A good tent may be quickly constructed in the following manner: Each post of the child's crib is extended by fastening to it in an upright position a bed slat; the frame is completed by cross-pieces above; sheets to cover the frame complete the tent. The child is placed in the crib at one end, the lamp is lighted, the sheet iron plate is adjusted and heated, and thirty grains of calomel are dropped upon it. The

lamp is then placed under cover at the end not occupied by the child; the vapor quickly rises and fills the tent. The usual time of each treatment is ten minutes, but may be varied of circumstances indicate. The attendants should be cautioned not to inhale the fumes unnecessarily, as mercurial poisoning is quite certain to result. In the patient, however, this effect does not follow. The temperature and humidity of the room should be the same as with any other treatment in the same disease. It is well to have the use of two rooms, reserving one to be used only while the treatment is in progress, and thoroughly airing it after using.

The prompt relief of stenosis I suppose to be due, partly at least, to the relaxation caused by the treatment, just as we see relief follow an emetic in membranous croup, even if no membrane is expelled. The cure is due doubtless, both to the local and to the constitutional action of the drug.—*Am. Practit.*

## AN AID TO PALPATION.

Chlapowski finds that for palpation of tumors of the abdomen an excellent method is to put the patient into a well-filled bath tub. The advantages gained are several: the reflex contraction of the abdominal walls is overcome; it is very easy to change the position of the body without exertion on the part of the patient; and the pain on the pressure is diminished. The author has had especially good results in determining the nature of tumors in the region of the cæcum, and in mapping out infiltration due to old appendicitis. He has also been able to determine the nature of floating kidneys, splenic tumors and different new growths, where previously the contraction of the abdominal muscle had prevented satisfactory examination.—*Boston Med. and Surg. Journal*.—*Nashville Jour. of Med. and Surg.*

## THE TREATMENT OF PHTHIRIASIS PUBIS.

Fournier in *L'Union Medicale* gives the following applications for the treatment of this troublesome condition:

R.	Distilled water,	12 ounces.
	Alcohol,	3 "
	Corrosive sublimate,	15 grains.
Or,		
R.	Vinegar	9 ounces.
	Corrosive sublimate,	15 grains.

Add to double this quantity of water and apply as a lotion. Sometimes applications of oil with beta-naphthol may be employed.—*Med. News.*

## CLASS-ROOM NOTES.

(From College and Clinical Record.)

—Prof. Da Costa is more than ever inclined to believe that *pneumonia* is due to a germ.

—Prof. Da Costa states that digitalis is the best of all remedies for *dilatation of the heart*.

—Dr. Brubaker states that gelsemine, given in physiological doses, may relieve *ovarian neuralgia*.

—Dr. Brubaker states that the pitch and cantharides plaster are the only blisters of any use for *kidney pains, lumbago*, and the like.

—In a case of *exophthalmic goitre*, brought before the clinic by Dr. Lewis Brinton, the patient was directed to take ten drops of tinct. *strophanthus* three times a day.

—In the case of a young woman in the clinic, who had *purulent cystitis*, Prof. Parvin ordered a one per cent. solution of creolin to be given three times a week by irrigator.

—Dr. Brubaker recommends the following prescription for the relief of *chronic dyspepsia*:

R. Tinct. gentian comp., f ̄ ̄ ij  
Sodii bicarb., ̄ iv  
Tinct. nucis vomicæ, f ̄ ̄ ij  
Syrup. rhei aromat., f ̄ ̄ j. M.

Sig.—Two teaspoonfuls in water before meals.

—Dr. Wirgman, before the clinic, in the case of a child aged twenty-four months, suffering from *hereditary syphilis*, ordered hydrarg. protiodide, gr. ̄, internally, and externally an application of oleate of mercury.

—Dr. Brubaker recommends the following prescription for *chronic constipation*:—

R. Extract. physostigmatis,  
Ext. belladonnæ,  
Ext. nucis vomicæ, āā gr. ij  
Aloin, gr. j. M.  
Ft. pil. xij.

—Before the clinic, Prof. Keen removed from the head of a child three years of age, what had been a pure *meningocele*; the opening in the skull was closed by a piece of decalcified bone. The wound was united by sutures. No drainage used. Bichloride dressing was employed.

—Prof. Brinton recommends the following prescription for *cystitis*:—

R. Uvæ ursi, ̄ j  
Lupulin., ̄ ss  
Aquæ bullient., Oj. M.

Adde—

Sodæ bicarb., ̄ ij  
Tinct. opii camph., f ̄ ̄ ij. M.

Dose, f ̄ ̄ j—f ̄ ̄ iv.

—A favorite prescription of Prof. Da Costa for *essential epilepsy* is the following:—

R. Sodii iodidi, gr. ij  
Sodii bromidi, gr. x  
Potassii bromidi, gr. v  
Tinct. gentian. comp.,  
Elixir. simpl., āā f ̄ ̄ ss. M.

Sig.—Take three times a day.

Diet, no meat; give fish and vegetables.

—Before the clinic Prof. Keen removed a *carcinomatous breast* from a woman forty-three years of age, there being considerable involvement of the axillary glands and pectoralis major muscle. All glands and fat were removed from the axilla, and all that portion of the pectoralis major muscle involved.

—In a case of *mitral insufficiency*, with marked edema of feet and legs, brought before the clinic by Dr. Lewis Brinton, the following was prescribed:—

R. Tinct. digitalis, gtt. x  
Infus. digitalis, f ̄ ̄ j. M.

Sig.—t. d., after meals.

Also—

Potassii bitart., ̄ j  
In glass of water before meals.

—Dr. Wirgman brought before the clinic a man who had suffered from *diabetes mellitus* for the last five years; at that time he was passing more than a gallon of urine a day, which contained a very large percentage of sugar. He was placed upon a modified diet, free from sugars and starch, and the following treatment: Sulphate of codeine, half a grain, in pill, three times a day; also a drachm of phosphate of sodium, three times a day, in hot water. Three days later he was again shown to the class, the amount of urine being reduced to three pints, and the percentage of sugar considerably lower.

## ACETANILIDE FOR VENEREAL SORES.

Early in the days when acetanilide was first introduced, some prominence was given to its antiseptic properties, but, in the crowd of substances specially introduced as members of the "antiseptics," this field of usefulness was forgotten. Quite recently its virtues in this direction have been accentuated by the descriptions of its use, instead of iodoform, in the treatment of hard and soft venereal sores. The chancre is simply dusted with the powdered compound, and the result is said to be a rapid and complete healing. The advantages of the odorless and nontoxic acetanilide over iodoform need no emphasis; while for hospitals and dispensaries its cheapness would further recommend it if increased observation confirm these statements.—*Provincial Med. Jour.—Med. Progress.*

## SOME PEDIATRICAL DON'TS.

By W. Newman Dorland, Philadelphia.

Don't fail, when called to a case, to acquire as complete a history of the illness from the nurse or mother as is possible *before* proceeding to an examination of the child.

Don't fall into the habit of ascribing the mother's fears and anxieties to an hysterical tendency which it is your duty to ignore. Listen to her, and profit by her suggestions.

Don't be cross or cross-looking while in any sick-room, and especially in that of a child.

Don't indulge in any sudden or violent movements while examining infants. Undue fright will thus be avoided.

Don't percuss the anterior surface of the chest first. Always commence with the back.

Don't forget that the respiratory sounds, especially the inspiratory, are normally full and harsh in childhood. Hence the term "puerile" respiration.

Don't expect to find the consolidation of phthisis in one or the other apex as in the adult. Very frequently it is found in other portions of the lung.

Don't make a diagnosis of pulmonary cavity from the presence of the "cracked pot sound" in children. This sound may be elicited in pleurisy and pneumonia as well.

Don't confound a pneumonia in its initial stage with a meningitis. The nervous manifestations of the former are quite pronounced, but the temperature chart will be the guide.

Don't take the temperature of a child in the axilla. The tissues here are usually very small and cannot sufficiently cover the bulb of the thermometer to secure accuracy of registration. The rectum is better.

Don't fail to examine into the condition of the *thoracic viscera* whenever the child complains violently of pain in its abdomen.

Don't forget that tubercular peritonitis in the child is frequently unattended with any pain or tenderness.

Don't forget that tubercular disease of the peritoneum and mesenteric glands is a frequent occurrence in early childhood and is usually indicated by great prominence of the abdomen.

Don't forget that the liver is relatively large in young children, and prominent below the ribs, even when there is no diseased condition present.

Don't fall into the popular habit of ascribing all of the complaints of the early months of infancy to teething. Teething is a physiological, not a pathological process.

Don't diagnose the presence of intestinal parasites until one or more of the worms have been seen.

Don't fail to administer a purge of castor oil on the first appearance of greenish-colored stools

Especially do this if the season be hot and sultry.

Don't fail to suspect the onset of some grave disorder—scarlatina, pneumonia or meningitis—whenever there is persistent vomiting.

Don't wean a child suddenly, unless such a course is made necessary by a sudden failure of the milk, or by sickness in the mother.

Don't permit a woman suffering from grave constitutional disease—tuberculosis or syphilis—to nurse her child.

Don't permit a woman who has become pregnant to continue nursing her infant.

Don't wean a child until after the twelfth month, if possible to avoid doing so.

Don't permit a child to nurse from the breast after the eighteenth month.

Don't wean a child during the summer season, unless absolutely unavoidable.

Don't give a baby which must be raised artificially food preparations containing starch or its derivatives, glucose and dextrine.

Don't fail to thoroughly sterilize the milk used in the preparation of foods for infants.

Don't fail to enforce a general rule for the feeding intervals. All danger from over or under-feeding will thus be avoided.

Don't permit the bottle, which should be very simple in its form, to become in the slightest degree unclean. Fermentation with its disastrous effects may thus be avoided.

Don't permit the baby to sleep with the nipple in its mouth.

Don't permit the milk to stand in the bottle. Throw what remains away after each feeding.

Don't fail to thoroughly scald the nipple, tube, and bottle after each feeding, and keep them in a solution of soda until the next using.

Don't give the baby the bottle to soothe the crying or fretfulness of temper. Such a proceeding is always harmful.

Don't fail to inquire thoroughly into the physical and moral qualifications of the wet-nurse, should one be required.

Don't prescribe a drug when a little attention to the diet or hygiene will do better.

Don't forget that infants are liable to take cold easily, owing to the relative feebleness of the heart and circulation. Proper wraps should, therefore, be provided, and ventilation secured without exposure.

Don't be alarmed at great rapidity of the pulse. Any undue excitement or prolonged crying, or any slight febrile excitation will give rise to a pulse out of all proportion to the gravity of the general condition. A rapid pulse during sleep, however, is of more grave significance.

Don't forget that heart stimulants are well borne in children in relatively large doses.

Don't forget that opiates are poorly borne in children.

Don't limit the supply of fresh air and sun-



light. A child can never get too much of these, even when sick. They should be so arranged, however, as to avoid eye strain and chilling.

Don't expose the eyes of a new-born infant to a sudden or very bright light.

Don't permit a child to assume a sitting posture at an early age. Spinal curvature may thus be produced, especially if the infant be rachitic.

Don't anticipate the natural efforts at locomotion, otherwise unsightly curving of the limbs may result, necessitating later operative procedures.

Don't designate the symptoms of rheumatism by the popular term "growing pains." Serious heart disease in its early stage may thus be overlooked.

Don't mistake cerebro-spinal meningitis for rheumatism. The diagnosis is often a difficult one.

Don't forget that tubercular meningitis is usually preceded for weeks or months by a gradual but progressive loss of flesh.

Don't mistake the relatively greater development of the head in proportion to the shoulders for a commencing hydrocephalus. It is the natural condition in the early weeks of infancy.

Don't mistake the normal breath-sounds which are heard in auscultating the fontanelles for the bruit which may be indicative of commencing disease, hydrocephalus or rickets.

Don't forget that inability to speak, inability to walk and other evidences of back-wardness in children may be due to some form of mental disorder, either idiocy or imbecility.

Don't forget that the pain of commencing coxalgia is first complained of usually in the knee of the affected side.

Don't forget to examine the urine frequently throughout the stadium of scarlet fever. Nephritis is a common sequel to this disease, and its onset must be watched for with jealous care.

Don't vaccinate an infant while it is suffering from eczema or tooth-rash.

Don't fail to keep the baby's chest protected by a rubber bib during dentition. Serious lung trouble may be avoided by this precaution.

Don't order large amounts of a medicine. One or two ounces of the preparation will generally suffice.

Don't fail to humor the whims of the mother when no harm can result to the child from so doing.

Don't fail to commence training an infant from the day of its birth. Much can be done in these early days toward regulating the habits of nursing, etc.

Don't forget that drugs administered to the mother will have a corresponding effect upon her nursing child.

Don't fail to remember that success in pediatrical practice necessarily depends largely upon acuteness of observation.—*Med. Progress.*

The following poetic effusion by a well-known Philadelphia practitioner was chanted at a meeting of the Flint Club, of Baltimore, Jan. 7th, 1891, the President, Dr. Geo. H. Rhoads, in the chair:—

### E PARVO MULTUM.

THE TRAGICAL AND LAMENTABLE FATE OF AN ERRANT BACILLUS KOCHII: AN HYSTERICO-BIOGRAPHICAL, LABORATORIOUS AND EPICAL EPISODE DONE INTO POETRY OF THE PRESENT DAY.

By Katisha Katzenjammer, of the Bacteriological Institute, etc.

(Translated from the Japanese.)

A little spore in a culture grew,  
Listen to my tale of woe!  
Imbedded in a mass of glue,  
Till a full-fledged bacillus it sprang into view.  
Listen to my tale of woe!  
Now, day by day, its ambition grew;  
Listen to my tale of woe!  
Like the witch in Macbeth, who made the stew,  
It said to itself, "I'll do! I'll do!"  
Listen to my tale of woe!

CHORUS (at discretion).

It saw its chance in a day or two;  
Listen to my tale of woe!  
A draught of wind through the laboratory blew,  
And out of the window the bacillus flew.  
Listen to my tale of woe!  
In a neighboring orchard a little peach grew;  
Listen to my tale of woe!  
The little bacillus came there too,  
And Johnny Jones with his sister Sue.  
Listen to my tale of woe!

CHORUS (at discretion)

Now, they ate the peach of the emerald hue,  
Listen to my tale of woe!  
And swallowed the little bacillus too,  
Which well in life its mission knew.  
Listen to my tale of woe!  
Now, the doctor was called to attend them two,  
Listen to my tale of woe!  
Who took from his pocket his microscope true,  
And brought the bacillus into view.  
Listen to my tale of woe!

CHORUS (at discretion).

He said, "Here's the cause of this cry and hue,"  
Listen to my tale of woe!  
For the comma-bacillus well he knew;  
And he stained it red and he stained it blue.  
Listen to my tale of woe!  
In Johnny's corpse was a peach-stone or two,  
Listen to my tale of woe!  
In Susan's abdomen a little glue;  
"Ah! here is infection and zymosis too,  
'Tis sad to say; Boo-hoo! Boo-hoo!"  
Listen to my tale of woe!

CHORUS (at discretion).

Now, all kind friends my advice to you,  
Listen to my tale of woe!  
Is when you are waiking with a maiden true,  
Avoid the peach of emerald hue;  
Listen to my tale of woe!  
And if, like Adam, you are tempted too;  
Listen to my tale of woe!  
Remember the fate of John and Sue,  
Who ate the peach of emerald hue,  
And the wicked bacillus that got stained blue.  
Listen to my tale of woe!

## CHORUS.

Hard trials for them two,  
Johnny Jones and his sister Sue,  
And the peach of emerald hue,  
Also the comma-bacillus too,  
Listen to my tale of woe!

—*Coll. and Clin. Record.*

## TREATMENT FOR GONORRHOEA.

R. Opium,	7 grains.
Acacia,	7 "
Saffron,	15 "
Boiling water,	5 ounces.

Make an infusion, filter, and add

R. Acetate of lead,	20 grains.
Sulphate of zinc,	45 "

Use as an infusion in the latter stages of gonorrhoea. In place of this the following may be employed:

R. Pyridine,	6 to 8 drops.
Distilled water,	2½ ounces.

Use three or four injections of this a day.

## THE DIAGNOSIS BETWEEN CONCUSSION AND COMPRESSION OF THE BRAIN.

Dr. Brinton gives the following diagnostic points between these conditions. *Concussion*:—1. Incomplete insensibility. 2. Partial muscular action. 3. Special senses act partially. 4. Patient can answer questions if roused. 5. Pulse quick; feeble; often intermittent. 6. Skin cold; temperature falls to 94° or 95°. 7. Respiration feeble; quiet. 8. Nausea and vomiting. 9. Pupils irregularly contracted. 10. Eye-lids somewhat open. 11. Urine voided; feces retained. *Compression*:—1. Complete insensibility. 2. Paralysis. 3. Special senses do not act. 4. Patient cannot answer questions if roused. 5. Pulse slow and laboring. 6. Skin hot and perspiring, temperature 102° to 104°. 7. Respiration labored, stertorous. 8. No nausea or vomiting. 9. Pupils irregularly dilated. 10. Eye-lids irregularly closed. 11. Retention of urine; involuntary escape of feces. —*Times and Register.*—*Int. Jour. of Surgery.*

## TREATMENT OF COLD ABSCESS.

The employment of ethereal solutions of iodoform in the treatment of cold abscesses often causes a great deal of pain. In consequence of this, Billroth employs the following treatment: The abscess is thoroughly opened across its greatest diameter, and its walls are rubbed with a tampon of iodoform gauze. After this the cavity is washed out with a solution of corrosive sublimate, of a strength of 1 to 3000, and finally after the edges of the wound have been sutured, a mixture composed of 100 parts of glycerine and 10 parts of iodoform is injected through a drainage tube, and allowed to remain in contact with the diseased surfaces. —*Medical News.*—*Int. Jour. of Surgery.*

## THE CANADA MEDICAL RECORD,

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## EDITORS:

A. LAPHORN SMITH, B.A., M.D., M.R.C.S., Eng., F.O.S., London  
F. WAYLAND CAMPBELL, M.A., M.D., L.R.C.P., London.

## ASSISTANT EDITOR

ROLLO CAMPBELL, C.M., M.D

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MONTREAL, SEPTEMBER, 1891.

## HOW TO ATTAIN LONG LIFE.

We remember to have read some years ago two excellent lectures in the *Nineteenth Century* by Sir Henry Thompson on the diseases of old age, and what we learned then we have made use of many times since, to the advantage of many elderly patients who were being unintentionally hurried towards the grave by the mistaken kindness of those who loved them best. As Sir Henry Thompson pointed out, and as we have many times in these columns repeated, many of the diseases of old age are due to loading the system with combustible materials long after the fires of youth and middle age have been extinguished. Nature, who is generally kinder to us than we are to ourselves, gives elderly people a strong hint by removing their teeth that the time has come to return to the liquid or semi-liquid diet of childhood, but science has been able to restore by means of artificial teeth both the dental beauty and ability to masticate properly belonging to youth, while habit, tastes and the wealth to gratify them impels us to eat more than we require.

Besides great moderation in eating, another very important factor in attaining long life is the practice of taking sufficient

sleep. There is no greater folly among the educated people of to-day than that of robbing themselves of nature's sweet restorer. The amount of sleep differs somewhat with the individual, but from seven to nine hours may be considered the usual modicum. We venture to say that very few people, in the cities at least, obtain anything like this allowance. Many, after falling into a nervous condition by depriving themselves of the necessary amount of sleep, forthwith repair to the druggist or the doctor with the foolish expectation that he can with narcotics undo the damage they have done themselves. False hope; how impossible to be realized. The sleep thus purchased is a costly luxury demanding each day a bigger price in loss of general health. Another mistake which we fear many of our medical brethren who ought to know better are making is that of turning night into day. If we must have nine hours sleep why not take it at night; surely from nine at night to six in the morning is no longer than from twelve till nine or one till ten. But it makes a great difference to the hardworked doctor. It means three or four hours less of artificial light, and if he is called up at three or four o'clock in the morning he will have had six or seven instead of only three or four hours of sleep. Just as living beyond our means must end in financial disaster, so must depriving oneself of ample sleep end in physical ruin.

"Early to bed and early to rise,  
Makes a man healthy and wealthy and wise,"

is even truer to-day than it was in the oldest times in which the proverb was coined.

#### CANADIAN MEDICAL ASSOCIATION.

The next meeting of the Canadian Medical Association, which will be held in Montreal on the 16th, 17th and 18th September, 1891, promises to be of more than usual interest. Many prominent members of the

profession have promised to be present and contribute papers, and although the number is by no means complete, yet, from the following appended list, the scientific interest of the next meeting is well assured:—

The Address on Surgery—Dr. Praeger, Nanaimo, B. C.

The address on Medicine: "Malaria, its Relations to and Influence over other Diseases"—Dr. Bray, Chatham, Ont.

Address on Therapeutics: "Water, Some of its Therapeutic Uses"—Dr. Spencer, Brandon, Man.

Dr. V. P. Gibney (New York)—"Early Diagnosis, the most important factor in the Treatment of Pott's Disease of the Spine."

Dr. John Ridlon (New York)—"Spondylitis."

Dr. John Price (Philadelphia)—"A Plea for Early Hysterectomy."

Dr. F. Buller (Montreal)—"Functional Abnormalities of the Ocular Muscles." This paper is expected to be discussed by Drs. Stevens, Roosa and Webster (New York).

Dr. Mullin (Hamilton, Ont)—"Some Notes on Cases of Post-partum Hemorrhage."

Dr. Cotton (Cowansville, Que.)—"Appendicitis."

Dr. Slack (Farnham, Que.)—"Surgical Cases occurring in Country Practice."

Dr. Small (Ottawa)—"Malignant Disease of the Cervix Complicating Labour."

Dr. W. S. Muir (Truro, N. S.)—"Graves' Disease."

Dr. Geo. Fenwick (Montreal)—"Calculous Pyelitis."

Dr. Laphorn Smith (Montreal)—"Cases treated by Abdominal Section and by Apostolis method."

Dr. Shepherd (Montreal)—"Cases of Strangulated Cæcal Hernia."

Dr. Buller (Montreal)—"Conservative Surgery of the Eye."

Dr. Jas. Bell (Montreal)—"The Local Treatment of Tuberculosis of the Bladder through a Suprapubic Incision."

Dr. R. F. Ruttan (Montreal)—"Lead and Drinking Water."

Dr. Wyatt Johnston (Montreal)—"Microscopic Examination of Sputum—Heart Disease."

Dr. J. Bradford McConnell (Montreal)—"Suppurative Hepatitis with Jaundice from obstructions of the Common Duct by infected gallstones."

Dr. Phelps (New York)—"The Mechanical Treatment of Hip Joint Disease."

Dr. Macallum (Toronto)—"The Pathology of Anæmia."

Papers have also been promised by Drs. T. Johnson-Alloway, Major, G. E. Armstrong, H. Lafleur and L. Smith (Montreal).

An entirely new, and doubtless to many, an interesting, feature of this year's meeting will be the devoting of an hour and a half each day to visiting the city hospitals. These hospitals are—Hotel Dieu, Montreal General, and Notre Dame. Members of the staff attached to these institutions have kindly undertaken to exhibit cases and present other matters of interest in connection with hospital work.

The delegates and visiting members will be tendered a dinner by the profession of Montreal, to be held in the Windsor Hotel, and arrangements are being made for an excursion should time and weather permit.

#### INTERNATIONAL AMERICAN MEDICAL CONGRESS.

At the last meeting of the American Medical Association held at Washington steps were taken to organize a Medical Congress for the whole continent of America. When we consider the size of the continent, which includes North and South America, it is surprising how little we know about those who inhabit the greater portion of it. We welcome therefore any scheme which is likely to make our brethren of the South better known to us, and there is no better way known of doing this than by bringing us together at medical and other congresses. The only obstacle that we can see is the fact of the English language not being generally spoken in those countries; but, sooner or later, the English language must be the universal language of the world, and such congresses would do a great deal to impress upon those southern countries the importance of acquiring it. Dr. Charles A. Reed, of Cincinnati, is chairman of the committee of organization, which is a guarantee that if large ability and boundless energy can accomplish the task, the Pan-American Medical Congress of 1892 will be a grand success.

#### BOOK NOTICES.

**THE SURGICAL TREATMENT OF WOUNDS AND OBSTRUCTION OF THE INTESTINES.** By Edward Martin, M.D., instructor in operative surgery University of Pennsylvania, surgeon to the Howard Hospital, assistant surgeon to the University Hospital, and H. A. Hare, M.D., Professor of Therapeutics, Jefferson Medical College; attending physician to St. Agnes Hospital. Price, \$2 nett. Philadelphia: W. B. Saunders, 913 Walnut street, 1891.

**HOW SHOULD GIRLS BE EDUCATED?**—A public health Problem for Mothers, Educators and physicians. By William Warren Potter, M.D., of Buffalo.

#### MONTHLIES.

**THE AMATEUR SPORTSMAN**, 6 College Place, New York. \$1 a year. Those of our readers who intend to take a holiday hunting or fishing would do well to read this interesting monthly.

**OUR DUMB ANIMALS**, 19 Milk street, Boston. 50 cents a year. This is published by the Society for the Prevention of Cruelty to Animals.

#### WEEKLY.

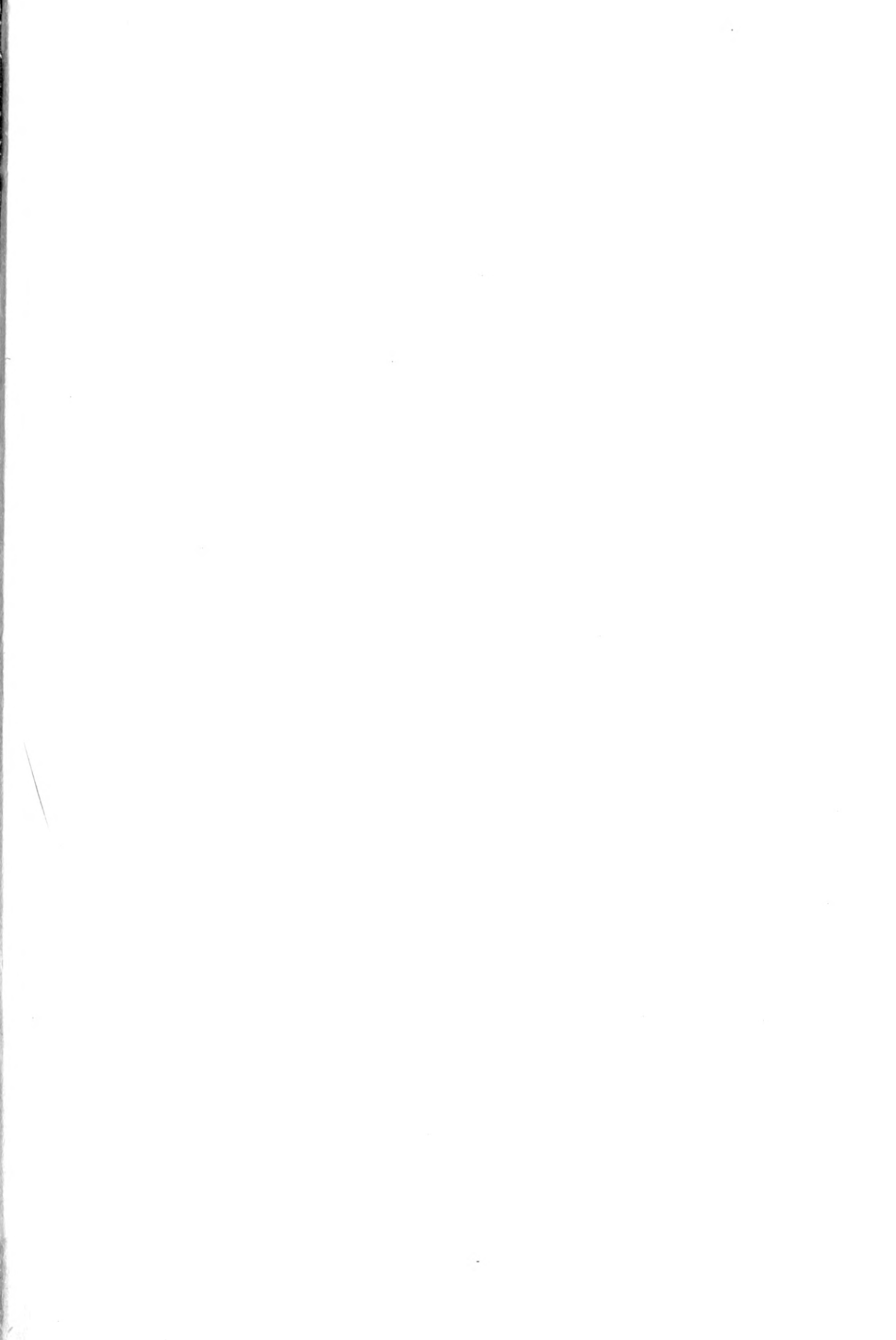
**THE NEW YORK LEDGER.** This splendid weekly costs only \$2 per annum.

#### PERSONAL.

Dr. Charles W. Dulles has retired from the editorship of the *Philadelphia Medical and Surgical Reporter* and Dr. Edward T. Reichut now fills that position. The *Reporter* is said to be the oldest medical weekly in the United States.

#### CARBOLIZED OIL IN SCABIES.

The Army-Surgeon (Der. Militärarzt) of Vienna recommends friction with carbolized oil (1 part carbolie acid to 15 parts olive oil) in scabies. In an unusually severe case, in which sulphur ointment had been employed in vain for four days, the affection, which involved the whole body, entirely disappeared after two days' application of carbolized oil. The remedy at once relieves the itching and is especially valuable in cases attended by considerable dermatitis, which is aggravated by sulphur ointment.—*Deutsche Med. Zeitung.*—*Med. Bulletin.*





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